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**Participatory Appraisal (PA) in the Classroom: The Use of PA
as a Technique to Advance Self-directed Learning through
Ongoing Needs Analysis**

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Bussabamintra Chalauisaeng

**A thesis submitted in partial fulfilment
of the requirement for the degree of Doctor of Philosophy**

**Department of Linguistics and English Studies
University of Durham
October 2004**



1 1 JAN 2005

Declaration

I declare that this thesis, which I submit for the degree of Doctor of Philosophy at the University of Durham, UK, is my own work and is not substantially the same as any which has previously been submitted for a degree at this or at any other university.

**Bussabamintra Chalauisaeng
University of Durham
October 2004**

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Abstract

This thesis gives an account of a case study in the form of classroom-based action research on the effectiveness of implementing Participatory Appraisal (PA) methods (adapted from Participatory Rural Appraisal (PRA) methods), as an innovative instrument of analysis for learner-based needs analysis in enhancing a learner centred approach. The aim was to move the learners in a certain ESP course: Technical English for Pharmacy students (TEP 411 236) to greater self-directedness, so that they would be able improve their own language skills, focusing on academic reading skills for their higher years of study at Khon Kean University in Thailand. The research also aimed to improve the learners' attitudes to and motivation for learning English as well as their attitudes to self-directed learning through the promotion of the learner centred approach. These purposes were expressed through a tailor-made course design based on the results of a learner-based needs analysis, with the implementation of PA methods to enhance a learner- centred approach focusing on promoting learner empowerment. These features were reflected in terms of shared decision-making and negotiation at all three levels of course design - planning, implementation and evaluation - involving materials, methodology and assessment. The teacher's role underpinning this process was that of a facilitator or a learning counsellor with whom the learners could discuss, negotiate and consult in order to achieve their learning goal.

The data from both the pilot study, the main study and the follow-up studies showed that the implementation had a positive effect on the learners' actual achievements and their attitudes to and motivation for learning English. The improvement of their attitudes to and motivation for learning the language were not statistically significantly higher, as the learners were constrained by the adjustment

needed to take on board a new method of teaching and learning for the first time within a very limited period. However, there was a clear indication as measured by both quantitative and qualitative research instruments such as questionnaires, participant observation and interviews that they welcomed this innovation in the highly significant improvement of their attitudes toward self-directed learning as the result of the intervention. The learners became willing to take responsibility for their own learning during the course through their active involvement in the learning process. The transfer of responsibility of learning from the teacher to the learners themselves took place gradually and continued after the course. The learners continued to pursue their self-directed learning after the course by transferring the learning strategies and language skills acquired during the course into their real world of communication.

Despite the nonsignificant result of the pre/post test, almost all of the learners as measured by the participant observation and the interviews perceived an improvement in their reading, through a sense of achievement in reading authentic English materials ranging from general health sciences to semi-technical and technical texts, and they also felt they had gained more confidence in reading English. More importantly, they enjoyed reading English for both pleasure and academic purposes, both during and after the course. Most of them had not found reading pleasurable prior to TEP 411 236.

Implications and recommendations of the research study arise from the findings of the pilot study and the main study and they became evident through the teacher's awareness of the possibilities of their practical application. The implementation of PA methods to enhance learner centredness in order to achieve the ultimate educational goal (i.e. learner empowerment for greater independence),

requires a high degree of effort on the part of the teacher both in terms of his/her knowledge and in terms of his/her commitment to making the teaching far more responsive to learners' needs. However, our outcome fully justifies such an endeavour.

To my beloved late father for his eternal love

To Dr. Amra Malila for her everlasting moral support

To Norma Dickinson for her exemplary loving kindness

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Chapter 1: Introduction

Introduction

Chapter one is a brief introductory section providing general information about English for Specific Purposes (ESP) in relation to learner-centredness and self-directed learning, needs analysis and Participatory Appraisal (PA) approach. Then the context of the research study, the background to the research project, the justification for the research study, the purpose of the research study, the significance of the research study and the chapter structure are provided.

1.1 From ESP to PA

As this research project was conducted in an English for Specific (ESP) course with the implementation of PA approach, a brief introduction from ESP to PA through needs analysis, learner-centredness and self-directedness is provided as follows:

A general working definition of ESP is ‘ESP is based on designing courses to meet learners’ needs’. (Waters and Hutchinson 1987: 3) and its course design involves three main areas: ‘needs analysis, models of learning and ways of describing language.’ (ibid:3). As learners’ needs are changeable throughout the course, the models of learning which can serve this nature of learners’ needs should be flexible. This leads to the implementation of Participatory Appraisal (PA) approach (Chambers 1997, Jones 1996) which aims to address the participants’ or learners’ needs through involving them in their learning process by helping them to appraise their own needs and deduce the appropriate learning strategies to meet them. This entails learner-centred model of learning (Tudor 1996a) which directs the ESP course towards the empowerment of learners to a greater understanding of their target situation and the objectives they must attain if they will function within it. This kind

of language learning focuses on the process of how to help learners understand the process of learning in order to learn the language effectively and meet their target situation needs. The ESP situation which existed in this project's place of study would also be familiar to many practitioners because of its ambitious aims and the lack of time afforded to meet them. This meant that it was impracticable to continue with a traditional, or classical curriculum approach where students covered their course's primary objective. It was only by engaging learner in a more protracted programme of self-study which extended far beyond the courses allotted hours that they had any hope of reaching the required reading target.

1.2 Context of the research study

The context of the research study will be discussed in general i.e. the government policy of learner centeredness and on English teaching as follow:

The Thai government has been promoting learner centeredness in all subjects through national education policy. English is a compulsory subject at every level from primary to tertiary (National Education Act of B.E. 2542 1999). Thai education is to be developed in order to keep pace with global changes in the new century. More importantly, this Act 'serves as master legislation on education in the country, leading to significant educational reform'. One of the principal tasks is 'Learning reform which will follow the guidelines and spirit of the provisions in the Act by attaching highest importance to learners. The Office of the National Education Committee (ONEC) has conducted research and development with regards to learner-centred teaching and the learning process, allowing learners to develop at their own pace and in accordance with their potential. Steps have been taken to identify a model teacher who would be given honour and support. Results of pilot projects have been disseminated for nationwide multiplication in the future' (Ministry of Education

2002). The government have therefore made learner centredness part of their own agenda.

In addition, according to the ‘National Plan on Education for All’ approved by the Cabinet on November 9, 1994, one of the Goals and Guidelines for Action Plans for the provision of basic education is aimed at developing students’ learning capabilities in the areas of self-learning, creative thinking and basic academic learning through developing teaching and learning methods that might enable students to show initiative, creativity, and learner independence. This was in accordance with the main objective of the 7th and 8th National Economic and Social Development plans (1992-1996 and 1997-2002), that is, to concentrate on human capacity development for developing the country within the 1st to the 6th plans (Ministry of Education 2002). However, the government still encounters many difficulties in implementing this plan due mainly to limited budgets and ineffective management. The curriculum and learning and teaching processes have been found to be neither appropriate to the needs of the learners nor to the society in relation to its present stage of national development (Ministry of Education 2002). In the professional teaching standards set by the Teachers Council of Thailand, the development of efficient and innovative lesson plans and learning materials that were responsive to learners’ needs was a requirement.

1.3 Background to the research project

Both a personal and academic interest in solving the learners’ problem in reading their target texts gave rise to this research project. In this particular situation, the course objectives which teachers tried to achieve were pre-determined by the authorities i.e. the faculty or the university. This resulted in teaching for testing

causing the real needs of the learners not to be addressed directly and effectively.

What grade learners were awarded at the end of the courses seemed to be the more important outcome, not how effectively the learners participated in the learning process and how well they could transfer the knowledge and the skills they acquired during the course to their real situation after the course ended. This entailed many related problems in terms of the learners' attitude to and motivation for learning to read English.

The problem of assuming the learners knew their needs led to choices of materials and pedagogical methods that did not suit their ability and background knowledge. A grammar translation approach was inevitably used as a short cut to get learners to understand reading materials. Instead of taking the real learning needs of the class into consideration in designing the course (Hutchinson and Waters (1987), Robinson (1980,1991), Richterich (1987) Nunan (1988a and b), West (1994) and Dudley –Evans and St. John (1998), the design was based mainly on the course objectives as defined by the teacher. These objectives were aimed at future needs for reading their target language materials in their real situation such as authentic English journal articles and reports in pharmaceutical sciences and related fields of studies. However, the learners were not ready to achieve these objectives due to the following fundamental problems:

- 1) The learners have problems with some necessary literacy and little adequate grounding in academic literacy. The learners might want to read more if they could choose what to read. Also, they would read better and with more sense of success if they were taken through a graded series of tasks.
- 2) There is limited time in the course. The learners need to be helped develop their self-directed learning or independent learning to obtain English language

literacy. My assumption is that the learners would start to take more responsibility for their own learning if they were allowed to get actively involved in the learning process through negotiation and decision-making about the pattern of their study. Having direct involvement in structuring the learning process would result in developing a positive attitude to and motivation for learning.

- 3) As they are ESP learners, they need to understand what their 'needs' are. They must also want their 'needs'. The assumption related to this problem was that the more the learners realised their target and learning needs, the more actions they would take to develop their own learning. This will lead to a search for methods for learner improvement and to a greater understanding of their learning predicament.

In addition to these difficulties, the learners had not gained enough background knowledge in their special field to cope with their target situation texts. The time allotted took no account of the learners' real level in relation to the target reading materials. That is the target course was offered in the first semester of the second year which the learners had just started learning subjects in their specialism. Thus, they had not gained enough background knowledge and they did not have immediate need to use English as in the higher year of study. Further, the analysis of the target situation failed to specify what was involved in making this group into successful readers of scientific literature. No thought had been given to the development of reading strategies in respect of this literature and to the learning needs of the learners. The idea of recreational reading as an induction to a more active vision of literacy had been neglected. This seemed to be the main reason for using grammar translation as

the most accessible pedagogical approach to achieve the course objectives while the present real needs of the learner were ignored.

Both the course objectives and the learner needs had to be met. An alternative approach to help the learners to achieve course objectives that were based on their own learning needs was called for. One approach, using an insight from Street (1984, 1993 and 2001); Barton (1994a, 1994b, 1998 and 2000); Sheridan, Street and Bloome (2000); Egan-Robertson and Bloome (1998) and Hamilton, Barton and Ivanic (2000) involved taking a social view of literacy and treating reading as an induction to a broad set of social practices. By this argument students had to be encouraged to adopt literacy practices whether reading in Thai or English. They had to acquire the habit of reading in this way whether in a recreational or work practice. Recreation was obviously a motivational point from which to start. This was strongly supported by Piantid (1999); Utkapan (2000) and Subniran (2000), extracts of whose articles advocating the culture of reading in Thai society to achieve the goal of educational reform were used as reading materials to raise the awareness of learners' reading needs. Three of the articles strongly agreed that Thai government had to promote reading systemically and consistently in order to improve the quality of education. This gave rise to the idea of offering the learners on this course an opportunity to learn how to read for pleasure. Furthermore the problems of attitudes to and motivation for learning to read English might be solved.

In order to achieve this, the learners had to be actively involved in the learning process. The teacher- centredness of grammar translation did not seem to be able to offer this successfully. There had to be an approach that would express and track the dynamic nature of the needs of the learners during the course in order to address these properly and give the learners an opportunity to directly and fully

participate in the learning process. Allowing the learners to use their own appraisal of the materials and learning methods during the learning process might solve the difficulties related to their reading problems.

Having identified the problem, it was necessary to undertake formal research to seek a solution. The process of doing conventional needs analysis systematically on a deeper and wider scale to revise the target course mainly in terms of the materials began in 1997 (Chalauisaeng 1997). This study consisted of a qualitative record of teaching experiences and formal needs analysis. The major problems identified in the target situation at that time were:

- The learners who took the target course i.e. Technical English for Pharmacy students (TEP 411 236) in 1997 did not have a sufficient sense of their own target situation needs due to the inappropriate allotted duration of the course (see section 1.3).
- The learners did not have the right attitudes to, and motivation for, learning to read English in the classroom frame of ESP because their needs were set out for them by the needs analysts e.g. the university or a teacher. They did not have sufficient awareness of where they were going and hence were not motivated to get there.
- The learners did not gain sufficient independent learning ability within the classroom frame of ESP because an outsider e.g. a course designer or a teacher, set out their needs for them without their direct involvement.
- Also the teacher did not have a sufficient sense of learners' needs as these were continually changing.
- The course was teacher-centred with pre-set course syllabus and materials.

- Teachers who taught this course felt obliged to conform to the pre-set syllabus as a requirement of the university and they were trained and had been using the grammar translation method for so many years that it was not easy to change their attitude and methods of teaching.

The objective of this present research project based on these problems was to look at possible types of needs analysis that in combination might provide information to solve the problems. Specifically, an approach to needs analysis was needed to respond to the flexibility of the learning situation to make the course itself into a process where the learners were brought to an understanding of their own needs. In that process they would also start to understand that just as their needs were a product of their individual experiences and collective circumstance so they as learners required different forms of awareness and understanding when confronting the needs' individualised nature. In short, they would garner a sense of their needs to achieve learning independence, as learners who could shape individual responses to the sense of their own needs in respect of the overall target.

As a result, the participatory appraisal (PA) methods (Chambers 1997a,b, c and d; Jones 1996; Pretty, Guilt, Thompson and Scoones, 1995 and Archer and Cottingham 1996) (see section.2.2) were used to help the class to engage in the learning process. Through these methods the real needs of the learners were taken into consideration so action could be taken at every stage of the teaching and learning processes, from the design to the evaluation of the course. PA methods were used to foster the learners' awareness of their own needs, so that these methods could start to be put forward as the solution to the learning problems. The research project focused on the impact of PA methods on the actual development of the learners and employed these methods as an intervention in actual teaching in order to look for the solution to

the problems embedded in this situation. That is, an improvement in practice was expected as it unfolded. Qualitative research methods were considered to be suitable to map the process of learning and teaching. They better revealed a learning process as an outcome than quantitative research methods.

1.4 Justification for the research study

A variety of closely related problems from the findings in the study in 1997 requiring to be solved in TEP 411 236 gave rise to this research study.

1. The learners of TEP 411 236 could not function effectively in their target situation. In other words, they could not read authentic technical English texts for their higher year of study or for their professional advancement. Nor could they effectively pursue their English studies in an insightful self-directed manner in order to improve their language ability after the course. Thus, there was a self-evident need for learner training, in order to deal with this critical deficiency.
2. The learners themselves consistently fully realised neither their target nor their learning needs when taking TEP 411 236. The course took place in the first semester of their second year, when it was too early for them to have gained enough background knowledge in their specialist field of study. This impacted adversely on their motivation. Thus it was necessary to raise their awareness of their own future needs to motivate them to adopt self-directed learning.
3. The learners were not able to communicate in English successfully despite studying English for many consecutive years. This impacted unfavourably on their attitude to and motivation for learning English. It was thus seen as very important to improve their language ability and

their attitude to and motivation for learning the language, and in particular to encourage them to pursue their own language studies in both an informed and self-directed manner according to their own needs and pace.

4. The need for self-directed learning was the most crucial for the learners in TEP 411 236 for two main reasons. Firstly, the contact hours of TEP 411 236, approximately twenty hours (see section 4.1.2.2), were far too limited to enable the learners to become proficient readers especially with their relatively limited current reading ability and background knowledge. Secondly, TEP 411 236 was the last English course they would be offered within their degree requirement. Thus the need to prepare the learners for self-directed learning was vital in order to help them to improve their own language skill for use in their higher year of study, and for their future professional advancement and life-long learning.
5. The learners were unfamiliar with learner empowerment in all subjects as a result of a teacher- centred approach, not only English. There was thus a need to change from a teacher-centred to learner-centred approach; this was imperative in order to actively involve the learners in the learning process, with the aim of transferring the responsibility of learning from the teacher to the learners themselves so that they could learn in a self-directed manner more effectively.
6. TEP 411 236 needed to be more responsive to the learners' needs in order to enable the learners to achieve the above- mentioned goals. It was thus essential to have an effective instrument for learner-based needs analysis

in order to determine and address the learners' own needs in an ongoing learning process.

In combination these issues called for a method of needs analysis that would help the student uncover the nature of their own target and learning needs. This method would have to be integrated into the course structure, so that the course itself would become an exercise in raising awareness, which should lead on to the achievement of greater learner independence. At the end of the course the students would understand the interventions, as well as the need to take charge of their own learning in order to carry forward the improvement in reading that they had already started to make.

1.5 Purpose of the research study

The fundamental purpose of this research study was to move the learners on, within the underlying constraints (see Section 1.5), to a more self-directed mode of learning so that they could improve their own language learning, focusing on reading skills in particular through PA methods as an instrument of needs analysis. All of the purposes are stated in those of the pilot and main studies (see section 3.1).

1.6 Significance of the research study

The research study was considered to be significant at three levels.

1. *The classroom context:* This study was an original experiment in using PA techniques to foster the learner awareness of needs, an awareness that must precede the achievement of the greater independence that in its turn leads to a genuine enhancement of reading.
2. *The local context:* This research study supported the local government's national educational policy, which advocated a learner-centred approach at all levels of the national educational system. Thus this national policy

arising from the latest local educational reform (see Section 4.1.1.6.3) was put into practice at a tertiary level by this research study.

3. *The international context:* While ESP course designers continued to advocate the implementation of a needs analysis, suggesting the involvement of learners in an ongoing assessment of course design in order to make the teaching more responsive to learners' needs, actual methods to put this idea into practice had not been properly evolved.

This research study has thus been an original attempt to develop the tools and methodology to achieve these goals.

1.7 Chapter structure

Chapter two provides the review of related literature on PA approach and covers six main topics: 1. ESP, 2. learner- centredness, 3. needs analysis, 4. PRA methods 5. reading in ESP and 6. some recent relevant research studies in ESP reading courses.

As the research study was carried out in an ESP course, ESP was first reviewed and followed with the discussion of learner-centred approach because both of them focused on serving learners' needs. Learner centredness is discussed in detail, considering how the theory of learner training and learner involvement, based on learner-based needs analysis, could be put into practice. This is based on the premise of promoting learner empowerment as the common grounds of the use of PA methods and a learner- centred approach in ESP to empower the learners to become more independent. Then different types of needs analyses are discussed, and analysed as to their potential appropriateness in an ESP classroom context especially a learner-based needs analysis which is an alternative needs analysis in order to respond to the fluidity of the learning situation. Next PRA or PA methods are then explored in relation to

the demonstrated needs in this specific context and adapted as an instrument for needs analysis, to involve the learners in analysing their own needs in order to achieve their own learning goal. In addition, as the research study aimed at helping the learners to improve their reading skills, a review of literature on reading for academic purposes is provided with some relevant previous studies.

Chapter three describes the design of both the pilot and main studies. It discusses the literature of research methods covering case study and research methods, action research, and also research instruments for data collection such as participant observation and interviews. It deals with two main types of research method i.e. qualitative and quantitative research methods, with their advantages and disadvantages. The stages of conducting both pilot and main studies, together with their research methodology and how they were employed, are discussed in detail.

Chapter four presents the findings of the pilot study. The results were provided by an initial needs analysis before the course and an ongoing learner-based needs analysis during the course. The main set of qualitative data from the pilot study is presented in the form of a narrative of what happened during the course. The findings of the pilot study led to the justification for the main study.

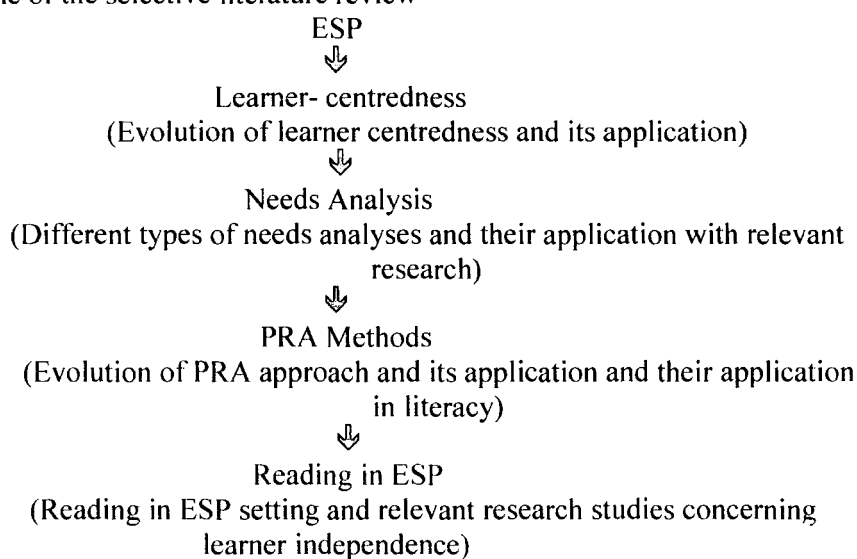
Chapter five presents the findings of the main study. The main study was conducted as a modification of the pilot study. Both qualitative and quantitative data were collected and is presented separately in response to the research hypotheses and research questions. Three follow-up studies are also presented. They were carried out six months, one year and a year and a half after the course to investigate the learners' progress. Finally, Chapter six discusses the implications and recommendations of the major findings arising out of the study with regard to the target situation and related areas of the study.

Chapter two: Related literature reviews of ESP to PA

Introduction

This research project originated from a need for an instrument of needs analysis that would respond to the fluidity of the learning situation and help ESP learners achieve the independence needed to develop academic reading skills within a learner- centred approach. To set the study in the context of ESP I will first review the literature of ESP and needs analysis in order to determine how far current methods meet this requirement. Next I will consider the PA approach as a possible response to the course requirement for a system of needs analysis that recognises the participant's ownership of his or her needs, responds to these needs' changing configuration, and redirects the course towards the goal of learner empowerment. Finally a brief review of reading in ESP will be discussed as the target course of the research project is focused on this skill area. The outline of the selective literature review is illustrated in Figure 1

Figure 1. Outline of the selective literature review



2.1 English for Specific Purposes

This section will discuss three main areas of ESP i.e. its evolution, its development and its course design.

2.1.1 Definition

As briefly introduced in Chapter One ESP in theory presupposes a specifically designed course to serve the needs of the learners within a particular situation. The other definition which suits the purpose of this research study is ‘ESP is an approach to language teaching in which all decisions as to content and method are based on the learners’ reason for learning’ (Hutchinson and Waters 1987:19). In other words, ‘ESP should properly be seen not as any particular language product but as an approach to language teaching which is directed by specific and apparent reasons for learning. (ibid) or it is a ‘goal-directed’ course based on learners’ needs analysis. (Robinson 1991). The other definitions of ESP are based on the absolute and variable characteristics of ESP. Strevens (1988: 1-2) suggests that ESP in terms of variable characteristics refers to English language teaching:

- a). which is designed to cater the learners’ specified needs;
- b) where the content is based on learners’ disciplines, occupations and activities
- c) where the language focus is on the learners’ activities and
- d.) contrasts with general English.

He suggests that ESP has variable characteristics because it may not be taught according to any pre-ordained methodology and may be restricted as to the language skills to be learned. However, Dudley-Evans and St. John (1998: 4-5) do attempt to make some of Strevens’ flexible criteria more rigid suggesting that it:

- a) is defined to serve learners’ specific needs;

b) utilizes the underlying methodology and activities of the discipline it serves;

c) is centred on the language (grammar, lexis, register), skills discourse and genres. ESP's variable characteristics can be found in how it:

a) may be related to or designed for specific disciplines;

b) may use a different methodology from that of general English in specific teaching situations;

c) is likely to be designed for adult learners either at a tertiary or secondary school levels for academic or professional purposes;

d) is generally designed for intermediate or advanced learners as it assumes some basic knowledge of the language system from the learners but possible for beginners in some particular cases.

2.1.2 The evolution of ESP

The definitions of ESP given above can reflect its evolution. That is an ESP course originated from three main reasons: 'the expansion of demand for English to suit particular needs, development in the field of linguistics and educational psychology (Hutchinson and Water 1987: 8).

For the first reason, Hutchinson and Waters (ibid) stated that there was a need to design 'cost -effective courses with clearly defined goals' within time and money constraints as the demand for English for technology and international business had increased since the end of the second world war (1945). Further, in the early 1970s during the Oil Boom in the Middle East countries further increased the need for these ESP courses as the oil nations sought to service the new technical needs of their

economies with locally educated personnel. More recently the need for ESP has been further increased by the pattern of globalisation, with English as this economic trends main language, and English for Business as its primary need.

The second reason is a revolution in linguistics which shifted the focus of language learning from a view of language as an autonomous, rule governed body of knowledge to one where it was used for real world communication (Widdowson 1978). Some pioneering work in ESP which followed this trend was that of Ewer and Latorre 1969; Swales 1971; Selinker and Trimble 1976 and Candlin, Bruton and Leather 1976. Now there are so many subdivisions of ESP such as English for Business, English for Medical Sciences, English for Tourism and others. The guiding principle of this early form of ESP was to analyse the linguistic characteristics of their specialism either in study or at work.

The third reason is that the focus on the learners' ESP' evolution was affected by the developments in educational psychology. Learners came to be considered to be at the centre of learning. Rodgers (1969) advocated the importance of learner attitudes and motivation. This emphasis on learner centredness also gave rise to the learning centred approach (Hutchinson and Waters 1987) with its emphasis less on the learner per se and more upon the need for a pedagogy to appeal to processes in learning.

In short, these three main factors fundamentally influenced the evolution of ESP.

2.1.3 The development of ESP

According to Hutchinson and Waters (1987: 9-15 adapted), the five stages of ESP development are:

1. Register analysis: the concept of a specialist language focusing on identifying the grammatical and lexical features of language for a specific register such as English for Pharmacy and English for Law (Swales 1971, 1990; Halliday, McIntosh and Stevens 1964; Ewer and Latorre 1969 and Ewer and Hughes-Davies 1971)
2. Rhetorical or discourse analysis: a focus on identifying 'the organisational patterns in texts in and specifying the linguistic meaning by which these patterns are signalled. These patterns would then form the syllabus of the ESP course' (Hutchinson and Waters 1987: 11) such as the work of Widdowson (1978) and Trimble (1985).
3. Target situation analysis: the view of ESP as based upon identifying the target situation in order to discover the linguistic features of that situation as in the work of Munby (1978a) and that of Chambers (1980).
4. Skills and strategies. This concept focuses on improving learners' language skills and strategies regardless of their specific language use. Some examples of ESP work focuses on skills and strategies as in University of Malaya ESP Project (1980) and the Brazilian ESP Project (Holmes 1981).
5. A learning-centred approach: focuses on how learners learn the language rather than what their language use is as in the work of Hutchinson and Waters (1984 and 1987).

It can be concluded that the development of ESP stems from demand and supply side factors. On the demand side we find the post-war demand for English as an international language of science and commerce and the more recent pressures of globalisation. This demand motivated the search for supply side solutions in the

communicative revolution in linguistics and the focus on the learner as an individual with varying target-situation needs and different and developing learning strategies.

2.1.4 ESP Today

ESP encompasses a preoccupation with needs analysis, methodology and skills and strategies. First, needs analysis has moved beyond pre-course analysis conducted among outsiders such as teachers or sponsors towards an on-going analysis of student perceptions of needs as these vary in relation to the target situation. This kind of comprehensive needs analysis entails a new trend in ESP methodology, one which promotes the learners' involvement in the learning process with their own appraisal as in the learner-centred approach (Nunan 1988a and Tudor 1996a). The ultimate goal is to empower the learners in order to enable them to become self-directed or more independent with a focus on both the learning strategies and language skills needed in their specialist study.

Needs can be studied through the following manifestations:

- 1). As language and register, or as frequently needed lexis and grammatical structures
- 2) As discourse, or as genre or Hallidayan register, or as the way in which discourse is arranged to serve the needs of a particular group and as the way that these arrangements prefer particular language forms
- 3) As a context of use, or as a move away from language to scenarios in which a linguistic exchange will unfold; the replication of this context as classroom teaching tasks or procedures
- 4) As skills or sub-skills with a focus not on language but as a byproduct of what we do with it: reading, writing, listening, speaking,

and the supporting subset such as: scanning, skimming or listening for gist. As Holme (1996: 1) states:

‘Most academic and professional education attempts to impart knowledge. It is information-centred. The skills that students need to process this knowledge are generally acquired as a by-product of their studies, yet they may be of greater long-term importance. Knowledge is often specific to particular jobs or situations, but skills are something a person can take with them everywhere. They are what enables the individual to cope with new circumstances.’

There have been difficulties with uncovering the specifics of a register, that is to say its structural and lexical peculiarities, as well as the fact that teaching specialized lexis can create an awkward overlap between subject teaching and ESP teaching (e.g. Hutchinson and Waters 1978, Dudley Dudley-Evans and St. John 1998) This has meant that the more recent focus has been on language at the discourse level as discourse is fashioned (or not) by the community in which it is embedded or upon skills and their associated strategies as these are identifying markers of a given community of practice (Halliday and Cooke 1983). An interest in the exploration of the skills and discourse that a given community requires has also emphasized the learner as an apprentice to that community who must themselves identify the knowledge they require to function within it. A concomitant stress is upon independent learning. More recently, as it has been noted, ESP has had to focus on how to help learners to cope independently with a given target situation. They should thus become independent learners with a specific skill and strategy training based on their own needs and appraisal through direct involvement in their own learning. Arguably, the afore-mentioned skills-based approaches treat the learner as central because they equip them with the capacity not to just negotiate a given situation but to understand the requirements of other contexts and to learn to negotiate these also.

2.2 Learner Centredness

2.2.1 Definition

The definition of learner centredness in this study is adopted from Tudor, since his work is most relevant to its aim of addressing learners' real needs through learner empowerment, which he states as the ultimate goal of language education. This ultimate goal is essential for developing learners' self-directedness. Thus, learner centredness is here defined as 'a broadly-based endeavour designed to gear language teaching, in terms of both the content and the form of instruction, around the needs and the characters of learners' (Tudor 1996a: ix). This implies that 'learner-centredness is not a method, nor can it be reduced to a set of teaching techniques. In the first instance, it involves a recognition of students' potential to contribute meaningfully to the shaping of their learning programme and then a willingness to accommodate this potential as far as the situation will realistically allow' (Tudor 1996 b: 281-289).

This concept has been adopted as the purpose of this research study. PA methods adapted from PRA methods are used as a tool to enhance learner centredness. PA methods are used to raise the learners' awareness of their target situation and learning needs through an ongoing needs analysis, in order to encourage them to take more responsibility for their own learning. Within the limitations of the specific context of this study, the process undertaken aimed to move the learners towards self-directedness so that they would be able to develop their own language ability, focusing on reading skills (see section 3.1).

2.2.2 Evolution of learner centredness

Tudor (1996a) summarises the trend of formative language teaching underpinning learner-centredness, stating that the need to find a form of language teaching which could be more responsive to learners' needs than traditional language teaching started in the 1960s. The first concern of this trend was for the authenticity of learning content associated with communicative language teaching, focusing on the functional needs of learners, and humanistic language teaching, emphasising personal relevance and the affective content of communication. The second concern was for a more active and self-directive role for learners in shaping their own study programme, based on the results of research into learning strategies undertaken in the 1970s. This led to fostering learners' informed and active involvement in their language studies. The learners were allowed to participate more in the learning process to shape their own study programme based on their needs, characteristics and expectations.

This qualitatively enhanced involvement of learners in their language study leads to a learner-centred curriculum (Nunan 1988) whose two main principles are that 'language learners should be the main reference point for decision making with respect to both the content and the form of teaching and this should be realised by the process of consultation and negotiation between the teacher and the learners' (Tudor 1996a: x). The learners could negotiate with the teacher regarding their preferred learning contents and how the learning process should be carried out to suit their needs.

Two implications arising out of this perspective are suggested by Tudor (ibid :x):

- 1.) 'Language teaching needs to acknowledge and work constructively with the diversity and richness of human experience that learners bring with them to their language study'. He focuses on learners' diverse learning goals, subjective needs, culturally based traditions of teaching and learning, the expectations and interaction norms influencing them and the teacher, and the socio-cultural aspects of their identity. As a result, learner centred teaching is not a fixed or pre-determined procedure, but one that needs to be adapted to suit each local teaching context.
- 2.) 'A learner centred approach to teaching arises out of the participatory or negotiative approach to decision-making which it recommends.' This gave rise to a negotiated syllabus as the traditional, teacher-driven approach was shifted to a learner centred approach, where the learners took a more participative role in decision making to shape their own language study to suit their real needs.

The formative trends and current practice underpinning the developing schools of thought within learner centredness are:

2.2.2.1 Formative trends

Formative trends cover humanistic language teaching, communicative language teaching, learning strategy research and individualisation.

2.2.2.1.1 Humanistic language teaching

Learner centredness is influenced by the humanistic movement in language teaching, in that learner centredness gives priority to the subjective and personal concerns of learners and focuses on meaning rather than language code. Also, learner

centred teaching emphasises the learning process with learners' affective involvement in their learning.

Humanistic language teaching was developed from the areas of general education and psychology (Maslow 1970; Roger 1961; Underhill 1989; Stevick 1976, 1980, 1990; Curran 1972, 1976; Gattegno 1972, 1976, 1988). It combined psychological and educational principles in second language teaching, such as in Moskowitz 1978; Stevick 1976, 1980; Gattegno 1976, 1972; Curran 1972, 1976. These language teaching methods were delineated as Total Physical Response, Suggestopedia, Community Language Learning, and Silent Way. The humanistic approach to language teaching focuses on: a) 'the development of human values, b) growth in self-awareness and in the understanding of others, c) sensitivity to human feeling and emotions and active student involvement in learning and in the way learning takes place' (Richards, Platt and Platt 1992:169). These basic principles of humanism were meant to be applied in the classroom through this approach. For example, the goal of developing learner independence, autonomy and a sense of personal responsibility for learning is reflected in Caleb Gattegno's Silent Way (1972, 1978), which supposedly advocates the limited intervention of the teacher while encouraging the learners to generate language and identify meaningful patterns themselves. Tudor considers this process as 'the process of learning to learn and of learner empowerment' (op.cit. 5). However, the Silent Way could just be considered a teacher-centred method, though it pretends not to be, since, the learners could not voice their needs and interest. Similarly, the Community Language Learning originated by Charles Curren (1972, 1976), which was an application of counselling learning to second and foreign language teaching and learning, involves no pre-set syllabus, with the language content derived directly from the interests and concerns of the learners themselves in

a supportive and non-judgemental atmosphere. These two examples of humanistic language teaching are relevant to seven main themes in humanistic psychology (Underhill 1989: 25, cited in Tudor, op.cit.: 3): 1) high-level health and well-being, 2) the whole person, 3) the human motivation towards self-realisation, 4) change and development, 5) education as a life-long process, 6) respect for an individual's subjective experience and 7) self-empowerment. These overlap with Stevick's five humanistic principles: 1) feelings, including both personal emotions and aesthetic appreciation, 2) social relations, 3) responsibility, the need for public scrutiny, criticism and correction, and disapproval of whoever or whatever denies their importance, 4) intellect, including knowledge, reason, and understanding and 5) self-actualization, the quest for full realization of one's own deepest true qualities (Stevick 1990: 23-24, cited in Tudor, op.cit.: 4).

As the above suggested, the weakness of humanistic teaching is that it ignores learners' real-world language needs. Another practical constraint is the disregard of cultural and social norms and the established traditions within the teaching and learning context so communicative language teaching was another alternative.

2.2.2.1.2 Communicative language teaching

Communicative language teaching arose in the mid-1960s as an attempt to find an alternative method for grammar-translation and audio-lingualism, and aimed to make language teaching more flexible and more responsive to the real world communicative needs of learners. The view of language as a restrictive linguistic code (Richterich 1973, 1983 and Richterich and Chancerel 1978) gave way to a focus on language as a system for expressing messages and achieving functional and communicative goals in real world interactive situations. This trend was greatly

influenced by the council of Europe's Modern Languages Project in 1963. It was intended to promote 'a learner-centred, motivation-based approach to teaching (Tudor 1996b: 8). It was considered as a goal setting approach because learners' functional and communicative needs in their target situations were defined as learning goals (Richterich 1973).

Further, there was additional influence from the attempt to develop appropriate English for Specific Purposes courses in the late 60's and early 70's by identifying the communicative target needs of learners (Munby 1978, Hutchinson and Waters 1987). Thus, the four main characteristics of a communicative view of language were: 1) 'language is a system for the expression of meaning, 2) the primary function of language is for interaction and communication 3) the structure of language reflects its functional and communicative uses, and 4) the primary units of language are not merely its grammatical and structural features, but categories of functional and communicative meaning as exemplified in discourse' (Richards and Rodgers 1986: 71). The identification of these characteristics resulted in the production of authentic language materials and tasks in communicative teaching.

While Krashen (1981,1982) claimed that the grammar would take care of itself, communicative language teaching contributed to learner centredness by way of the prioritisation of the real communicative needs or learning goals of learners. It also 'fostered an experiential form of language study in which learners' real world experience and concerns were given a central role in learning activities' (Tudor 1996a: 10)

2.2.2.1.3 Learning strategy research

Learning strategies are defined as ‘purposeful activities undertaken by learners with the goal of promoting their knowledge of and ability to use the target language’ (Tudor 1996a: 10). The findings of research from the early 1970s (Rubin 1975; Naiman et al., 1978; Rubin 1987 and Wenden 1991) in respect of the learning strategies of good or successful language learners contributed to learner preparation in learner centred teaching in terms of attitudes and behaviours. This led to the promotion and encouragement of learners taking a more active role in their subjective involvement in the learning process, in order to achieve greater independence.

2.2.2.1.4 Individualization

Individualised instruction was developed during the 1960s and 1970s (e.g. Altman 1972; Dickinson 1978; Holec 1979) as an attempt to find more flexible and more responsive teaching procedures to the varying paces and subjective needs of learners. However, individualised instruction was criticized as being material- and teacher-centred in practice. Dickinson (1978) suggests a way in which individualisation may be used for successful learner-centred language teaching. He states that there should be ‘flexibility in the teacher–student role relationship to allow for direct learner consultation with regard to teaching content and form’ and ‘the systematic development of learners’ understanding of the learning process as a basis for meaningful learner involvement in programme development’ (Tudor 1996a: 12).

2.2.2.2 Current Practice

This section discusses three major practical perspectives on learner centredness in recent years: 1) learner centredness as a principle for activity organization, 2) the learner centred curriculum and 3) learner independence.

2.2.2.2.1 Learner-centredness as a principle for activity organization

The first practical perspective which originated from the learner-based mode of teaching (Holme 1991; Deller 1991; Campbell and Kryszewska 1992), was learner-centredness as a principle for activity organisation. It emphasised activities and teaching content generated by the learners themselves and the of their specialist fields of work or study, e.g. English for Specific Purposes (ESP) learners. A learner-based mode of teaching was seen as an alternative which could serve the real needs and interests of local learners in any situation where general commercial course books were either irrelevant or inadequate. It also helped to counter the difficulties of large classes, as an individual learner had his own task according to his individual pace and needs. Campbell and Kryszewska (1992: 7-9) stated nine main advantages of the learner-based mode of teaching which were most relevant to the ESP situation. They are summarised as follows:

1. 'learners' potential': their experiences in their areas of expertise could contribute to the learning process;
2. 'constant needs analysis': the process of on-going needs analysis for suitable activities was based on current learners' needs;
3. 'topicality': teaching materials with local and international current issues could best meet learners' needs and interests;

4. 'previous learning experience': an open-ended frame work for learning was provided to be filled out as each learner chose;
5. 'learners as authors': as learners took part in material preparation and production, their learning was reinforced while they used the material in class;
6. 'pace': as the activity progressed with the total involvement of the learners, the pace of learning increased because the learners became more independent;
7. 'the element of surprise': unseen materials made the lessons unpredictable and thus interested the learners;
8. 'peer teaching and correction': learners could learn more and help each other to learn through working in pairs and small groups;
9. 'group solidarity': learners could learn to cooperate or collaborate with each other through group work.

These advantages are very relevant to the principles of PA methods used in this ESP classroom as they both value the existing potential of the learners/participants and empower them to take action for sustainable self/community development based on their own needs in an ongoing process, and with the collaboration of all parties involved.

Tudor (1996a: 15, adapted) summarised the learner-based activities proposed by Deller (1991) and Campbell and Kryszewska (1992) into four main categories, involving: 1) the use of learner knowledge as an input resource to produce more

relevant and motivating language content; 2) the use of L1 to generate the use of L2; 3) direct learner involvement in activity development and organisation, allowing the learners to have greater insight in respect of their learning goals and offering a form of learner-training; and 4) the use of personal expression, imagination and creativity in affectively-based activities, which was closely related to humanistic language teaching. Thus it is implied that through learner-based activities, learners' real needs, expertise, learning experiences and perspectives on the learning process and collaboration with fellow learners were fully used as the principles for activity organization to enhance learner-centredness.

2.2.2.2.2 Learner independence

The second practical perspective was learner independence as the result of education as a means of empowerment. The aim was to actively involve learners in their learning process in an informed and self-directed manner in order to help them to become independent in the achievement of their chosen goals; thus, 'learner centredness as an undertaking whose ultimate goal is the empowerment of learners by means of language education' (Tudor 1996a: xiii). Independent study is one of the most important educational objectives, to give learners the motivation and skills for life long learning. In order to achieve this goal, i.e. to enable the learners to become independent in their language learning, learner centredness is used as an open-ended endeavour to enable suitable learning conditions for learners' active participation. The level of participation of the learners in their own learning or their responsibility for their own learning implies various levels of learner independence.

Over the past two decades, learner independence has been characterised in varying terms, the most prominent being learner autonomy. Other terms were: independent

learning, flexible learning, self-instruction or self-instructional learning, self-direction or self-directed learning, self-access learning, and individualised instruction (Holec 1979; Wenden and Rubin 1987; Brooks and Grundy 1988; Dickinson 1987, 1995). For example, Holec (1983: 3) defines learner autonomy as ‘the ability to take charge of one’s own learning’. The definition of learner autonomy given by Huttenen (1986: 232) is ‘the willingness and ability of the learner to take responsibility for his own learning’ and Wenden (1991: 163) defines an autonomous learner as ‘one who acquires the strategies and knowledge to take some (if not yet all) responsibility for her language learning and is willing and self-confident enough to do so’. These definitions implied a shift in emphasis within learner autonomy from focus on the mode of study to qualitative involvement. Tudor (1996a: 18) summarises two different senses of autonomy: the former sense as ‘various forms of independent or self-directed learning involving limited teacher intervention, generally outside a traditional classroom setting’ and ‘a latter, qualitative sense of autonomy relates to notions of awareness of learning goals, participation in decision making, and personal assumption of responsibility’. The qualitative sense of autonomy has received most attention in this modern world of teaching and learning since it implied that ‘the learners may or may not wish to study in an independent manner, but their ability to make this decision and to implement it effectively is dependent upon their strategic and attitudinal preparedness’ (ibid.).

This qualitative sense of autonomy led to the different levels of independence. This issue will be discussed because it closely relates to training learners in order to achieve different levels or degrees of autonomy based on Dickinson’s definitions of autonomy and self-directed learning (Dickinson 1987). The rationale for this was that the objectives of each language course needed to be realistically based on its

particular limitations. As the case study of this research project was a taught course with approximately twenty contact hours, the aim of moving the learners toward self-directed learning was the only realistic one, with the use of PA methods to enhance learner-centredness, which was the mode of teaching intended to achieve that aim.

Thus, its purpose was to move the learners toward more self-directed learning rather than to autonomy with the definition of self-directed learning as: ‘an attitude to learning in which the learner accepts responsibility for his learning, but he does not necessarily carry out courses of action independently in connection to it’ (Dickinson 1987:11-12). Becoming self-directed is of course a state very different from being autonomous, but self-directed learning was expected to lead ultimately to autonomy. Dickinson (*ibid.*: 11) defines autonomy as ‘the situation in which the learner is totally responsible for all of the decisions concerned with his learning and the implementation of those decisions’. In full autonomy, no ‘teacher’ or institution is involved and the learner is also independent of specially prepared materials. The differences between self-directed learners and autonomous learners are laid out in Table 1.

Table 1 Differences between self-directed learners and autonomous learners

Characteristics of self-directed learners	Characteristics of autonomous learners
1. Retaining responsibility for the aims and objectives of the course i.e. being aware of them and accepting them.	1. Understanding what is being taught, i.e. having sufficient understanding of language, learning to understand the purpose of pedagogical choices.
2. Monitoring the development of the course and its continuing relevance to their own objectives.	2. Being able to formulate their own learning objectives.
3. Assessing themselves to see how well they achieve learning tasks and having a reasonable idea of their level of proficiency.	3. Being able to select and make use of appropriate learning strategies.
4. Taking an active role in learning by seeking out every opportunity to understand, practise and learn. (Caver and Dickinson 1982: 15)	4. Being able to monitor their use of these strategies.
	5. Being able to self-assess and monitor their own learning. (Dickinson 1993: 330-331)

2.2.2.2.3 Learner-centred curriculum

The third current practical perspective was the learner-centred curriculum. The concept of the learner-centred curriculum developed by Nunan (1988) derived from an Australian language programme: the Adult Migration Education Program (AMEP). The concept underpinning the learner-centred curriculum is that the decision making for the content and form of language teaching is based on the learners' needs through the interactive process of negotiation and consultation between the learners and the teacher in each particular learning situation.

Nunan's learner-centred curriculum used the real-world communicative needs of learners as the focus for goal setting, as in communicative language teaching, but he added procedures for identifying the objective needs of the learners, the criteria for

selecting methodology and the nature of decision-making. The rationale for these three additional aspects was summed up by Tudor (op. cit.: 21) as:

1. In order to create genuine learner-centredness, the procedures of needs analysis should be 'expanded to accommodate more direct input from learners, and...needs analysis should be a developmental process, allowing goal-setting to emerge gradually, as learners come to understand and acquire the ability to formulate their insights into their communicative needs'.
2. In order to select suitable methodology, the process-oriented needs analysis or learners' subjective needs analysis was emphasised in order to identify 'various cognitive, affective and attitudinal factors influencing learners' reactions to teaching procedures' to justify the methodological choice based on learners' subjective needs.
3. In order to enhance learners' active participation in decision-making via ongoing consultation and negotiation, 'learners explore both their objective and their subjective learning needs in collaboration with their teacher as part of a shared process of discovery'.

These three aspects were relevant to PA methods implemented in this study as they were used to enhance learner centredness via the negotiated syllabus through an ongoing needs analysis.

Firstly, PA methods focus on incorporating data directly arising from the participants themselves, based on the recognition of their clearest understanding of their own situation. They were placed at the centre of development initiatives. They were encouraged to actively participate in the ongoing process of needs analysis to

find appropriate solutions for their own local problems in order to achieve sustainable rural development.

Secondly, the methods emphasise the use of a range of methods such as maps and matrices to avoid literacy problems in collecting accurate information directly from the local people based on their own needs. The rural developer takes the role of a facilitator who needs to be flexible to their subjective needs and clearly understand the realities of their lives.

Thirdly, the methods stress a self-explorative approach to enable local people to conduct their own analysis through the process of sharing and developing ideas within a community. Their real needs are discussed with the support of one another and the facilitator to promote local actions based on their own decisions.

In sum, the evolution of the learner centred approach is similar to that of the PA approach, in that both of them arose from the need to be more responsive to the learners/participants. This entails the concept of learner centred method.

2.2.3 Concept of learner centred method

The influential factors on the evolution of learner centredness mentioned earlier give rise to the broad concept of learner centredness as an attempt to make teaching structures more responsive to learners' needs. Its instructional content reflects the learners' communicative needs and their intentions while the form of instruction searches for learning structures that are more responsive to the learners' subjective or process-oriented needs. Thus, there is no restrictive concept of 'one right way of teaching'. However, Tudor (1996a: 25) suggests a broad view of the nature of learner centred teaching. The learner centred approach:

- ‘ - accepts and seeks to learn from the perspectives on language teaching contained in any method or approach, as well as from the insights teachers derive from their everyday teaching experience; it does this in the belief that openness to a variety of experiences and insights makes the language teacher better able to respond to local needs.
- positively accepts diversity between learners, learning contexts and learning goals; it rejects the contention that there is one universally ‘right’ way either to teach or to learn.
- is concerned in the first instance with the learners involvement and with the quality of their learning; the means by which this is achieved are secondary, and are to be chosen in response to the characteristics of the learners themselves and of the learning context.
- is open to insights from any source, within or outside language teaching, providing better understanding of the needs of learners is achieved and more effective teaching and learning procedures are identified; it does not set up ideological barriers.
- generates a healthy dissatisfaction with current practices, as it maintains that there is no once-and-for-all right answer, but only appropriate, local responses to local needs; learner-centred teaching is always novel, since each new group of learners is always different from the last.
- seeks coherence in terms of the adequacy of its response to the needs of each new group of learners; its coherence is to be sought locally, in terms of the human and educational development of each new group of students.’

These six points were exemplified in the case study through the use of a variety of teaching methods as a solution for problems which occurred during the teaching and learning process. The pilot and main studies were conducted in the same situation with parallel case studies. Different ways of applying the same PA methods were chosen to best suit real teaching and learning needs at specific times, as PA methods adapted from PRA methods had their ‘roots in a reaction to the Green Revolution: being against technological solutions to development which end up as external, imposed and pre-packaged solutions to rural problems’ (Archer 1994:63). Similarly, it could be summarised that there are no definitive formulae for teaching,

but rather an appropriate method for each particular teaching and learning situation. Learner centredness aims to provide a suitable alternative that can deal with the complexity and diversity of human behaviour in each class as a unique local community. This entails the teacher preparation to take a teacher's role in learner centredness.

2.2.3.1 Teacher Preparation

To use learner-centred approach affectively, the teacher needs to prepare himself/herself. The role of the teacher closely relates to the broad concept of method. Thus, this section will discuss a broad view of the role of the teacher in adopting a learner centred mode of teaching.

There is an assumed equal relationship between the teacher and the learners in learner-centredness because it involves a two-way flow of insights between them, based on mutual knowledge and understanding and on respect of the other's individuality. Thus, the teacher needs to understand the learners' attitudes to and motivation for language learning, their beliefs about language learning, their learning goals and their types of learning strategies in order to take an appropriate role. For example, if the learners resisted taking an independent role in their learning, the teacher might need to play a more directive role, but with the ultimate purpose of helping them achieve greater independence. As a result, the teacher needs to be more flexible and be ready to take various roles. The choice between the directive or authoritarian role and that of facilitator or learning counsellor depends on learners' language learning experiences together with the teacher's initiative in avoiding making the learners feel that the teacher is placing excessive demands on their adaptiveness to their new self-directive role. Yet, the goal for the teacher is to move

towards the role of learning counsellor. Thus, teachers adopting learner centredness need to take on board five extra responsibilities suggested by Tudor (1996b: 274-280) and summarized as follows:

- 1). Preparing learners by raising: a) self-awareness as language learners, b) awareness of learning goals, c) awareness of learning options and d) language awareness.
- 2). Analysing learner needs, including encouraging their contribution to their own needs analysis, leading to discussion, negotiation and consultation between teacher and learners for learning goal setting.
- 3). Selecting methodology based on a) learners' preferred learning style and experience of or attitudes to language learning, b) learners' active involvement in planning their own learning programme.
- 4). Transferring responsibility depending on learners' motivation, maturity, cultural attitudes to language study and to the roles of teacher and learners, and external constraints limiting their goal achievement. Continuing to ensure effective learning is a teacher's ultimate goal, while considering what the learners have to contribute as responsibility is transferred, and how this can make learning more effective, since they may or may not be able to assume a constructive and responsible role in shaping their own learning programme.

5). Involving learners in contributing sensible decision-making with regards to:

- a) course structure e.g. the combined components of in-class, self-access and independent study,
- b) goal-setting,
- c) choice of methodology,
- d) selection of activity and organization,
- e) linguistic syllabus or choice of language points,
- f) choice of materials,
- g) evaluation and
- h) independent study.

The feasibility of this partnership model of teaching and learning depends on the learners' capability, as mentioned in 4 above, and on the teacher's ability to make the best use of these capabilities in terms of the methods used by the learning counsellor to involve the learners in so doing. Apart from experience of traditional modes of teaching, a teacher needs to possess as a minimum another three major sets of skills, which are summarised below from the suggestions of Tudor (1996a, 1996b).

1). Needs analysis skills:

- a. to identify learners' objective (product-oriented) needs and for goal setting through different types of needs analysis and assessment procedures,

- b. to explore their subjective (process-oriented) needs with respect to their current ability as well as their attitudes to learning and learning preferences.
- 2). Personal skills of flexibility and adaptability derived from a teacher's maturity and human intuition in the evaluation of the learner's potential and to enable appropriate negotiation.
- 3). Educational skills in terms of the endeavour to develop learners' awareness and shape their ability to best exploit their own knowledge and experiences through learner training and learner involvement.
- 4). Course planning skills to deal with the unpredictable mode of teaching as a result of negotiation and consultation for goal setting and pedagogical options etc. This implies that the teacher needs to be familiar with various types of teaching methodologies, learning materials and learning options to plan a course with a balance between language instruction (i.e. helping learners develop language skills and communicative abilities) and language education (i.e. helping learners develop their own insight into language study and their strategic learning skills), based on the results of the two types of needs analyses mentioned in 1 above.

It seems that a teacher who needs to adopt learner centredness needs to be specially trained to acquire these main skills. However, these skills can be gained through direct experiences by training oneself through an action research in the classroom or by in-service training within the department. To deal with this

challenging mode of teaching within the role of learning counsellor, the teacher needs to see this approach as a means of reaching a more effective teaching and learning outcome i.e. leading the learners to self-directedness and empowerment through teacher counselling and guidance. Similar to learners themselves, a self-critical and self-reflective approach to the effect of teaching on the learners greatly helps the teacher to adjust his/ her role to be suitable for a particular teaching situation. Teachers, like their learners, need to learn from the process of their teaching.

However, when teachers are innovating, they have to be aware of some essential points in order to achieve their objectives. Bassno (1986: 15-19) suggests six major points: 1) the need to be aware of learners' prior learning experiences and learning assumptions, 2) the need to build learners' confidence in the teachers' expertise and qualifications, 3) the need to start at the current educational stage of the learners and to progress slowly, 4) the need to demonstrate to the learners their own achievements, 5) the need to allow free choices as much as possible, and 6) the need to become aware of the learners' interests and objectives.

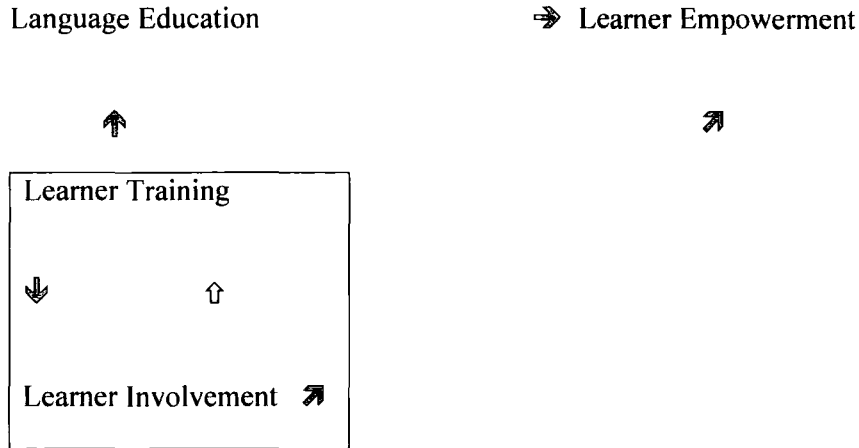
All of the points mentioned are relevant to the role of facilitators who implement PA methods in terms of their attitudes and behaviours. They need to be self-critical and continue improving their skills to manage the training process to be more responsive to the needs of the participants as much as possible. However, it is not easy for either the teacher of English or the professional in rural development to change from the role of authoritarian to one of facilitator or a partner, as they might feel their authority was threatened. Above all, 'participatory training is two-way training...by which people discover their own strengths, develop problems-solving skills and together play more effective roles in managing their environment'

(Srinivasan 1990: 24). Participatory activities help the participants/learners learn new skills, in turn the teacher/facilitator learns more about their problems and how to help them acquire those skills. The teacher/facilitator also needs to acquire all the skills mentioned above to be flexible and responsive to the needs of the learners/ participants to create a mutual climate of respect, with a non-judgemental approach, and achieve successful innovation. The concept of the role of teacher leads to a discussion of: 1) learner empowerment, 2) learner training and learner involvement.

2.2.3.2 *Learner Empowerment*

Learner empowerment is the ultimate goal of the learner-centred approach. Learners need to be moved beyond mastering short-term learning objectives, such as mastering some selected language structures or chosen functional tasks, to become independent learners. This means that the learners need to be helped to ‘develop the understanding and insights which will allow them to pursue their language study in an informed and self-directed manner - whether they decide to do this within a formal learning context or by means of some form of independent study’ (Tudor 1996a: 27). The components of a learner- centred approach, which reflect the relationship between language education and learner empowerment, are shown in Figure 2.

Figure 2. Components of learner centred approach



(Source: Tudor 1996a: 28)

Tudor (ibid: 27-28) explains the relationship between each component as follows:

‘language education involves the acquisition by learners of an understanding of language, language use and language learning, and of their own subjective interaction with the process of language study. This need not be an academic understanding, but something that is living and personalised which learners can use to direct their language-related behaviour in an informed manner. Learner empowerment is the result and practical realisation of language education. It relates to the learner’s ability to assume an active and informed role in their language study and, ultimately, to pursue those of their life goals which pertain to language use and learning in a self-directive manner.’

In order to achieve the ultimate goal of learner-centredness, learner empowerment and the two sub-processes within language education, learner training and learner involvement need to be developed. Learner training, involving the initial

sharing of perspectives between the teacher and the learners and among the learners themselves, leads to direct learner involvement in the shaping of study programme. Any level of learner involvement or participation is possible, from material provision for a selected learning task to the essence of learner centredness: negotiation and joint selection of learning content, form and assessment procedures. These two processes reinforce each other. During participation, a new cycle of learner training may be necessary if the learners need to acquire other essential skills during the participation process. Any involvement in learning development within the learner-centred teaching mode is empowering, aiming to help the learners achieve greater independence.

The learners' understanding of language increases as the learner training progresses as it is a strand running throughout the learners' learning career. This process allows learner involvement as the teacher and the learners exchange their knowledge and insights, leading to the process of consultation and negotiation and joint selection of learning content and form. Learner training in learner-centred teaching helps the learners to intensify their understanding of language learning. It also enables them to acquire the necessary knowledge and skills to monitor their language learning so that they are able to work in an informed and ultimately a more self-directed manner.

Similarly, PA methods were developed to empower non-literate people to be able to assert themselves (Freire 1972, 1974; Archer 1994, 1996 and Chambers 1994 a,b,c, and 1997). Their methods sought to be reflective and committed to equity, empowering marginalized, poor people to do much of their own investigation, analysis and planning. At the same time, the methods encouraged professionals to

learn through engagement and committed action by reflecting critically on their concepts, values, behaviour and methods, taking a role of facilitators. Empowerment is thus the common ground for both the learner centred and PA approaches.

2.2.3.3 Relationship between Learner Training and Learner Involvement

As the learner-centred approach demands that learners be actively and reflectively involved in the learning process, it is necessary to prepare the learners to take part in this participative approach to learning. Some learners may not be prepared to take responsibility for their own learning in a self-directive role. This might be due to a lack of necessary knowledge or skills, prior learning experiences or culturally based expectations of language study. Learners need to be developed in terms of both language knowledge and personal ability in communication in order to be able to become effectively involved in the learning process in a self-directive role. In order for the learners to assume this role, they need to be trained through the ongoing process of self-critical assessment of their current attitudes and beliefs about learning. Also they needed to be trained in how to acquire language knowledge and study skills to manage their own learning effectively in a self-directed manner.

Many suggestions as to how the learner might be trained to consider the factors affecting their learning and seek the most suitable learning strategies in order to learn more effectively and be more responsible for their own study, have been offered. However, there has not been any case study which puts them into practice by combining both learner training and learner involvement in the on-going learning process. Thus this research project attempts to put this concept into practice by implementing PA methods. Through these methods, both objective and subjective

needs analyses were undertaken by the learners themselves throughout the course. It was an on-going process of needs analysis, which simultaneously integrated both learner training and learner involvement in the learning process. The learners are assumed to be genuinely responsible for their own learning and to have a self-directive role.

The initial learner training was affected in strategic and attitudinal terms, i.e. learning goals and motivation and learner's beliefs or expectations about language learning. Dickinson (1988) and Ellis and Sinclair (1989) suggest some components upon which learner training should focus on, for example, the language learning and its learning process, the language structure and its use and the learners themselves as language learners.

The first component dealt with helping learners develop their understanding of language learning and their available learning options in order to achieve their learning goal. The second involved helping learners to develop insights into the nature of language and of language use to raise their awareness of the expected outcome of learning activities and help them to be able to monitor their own progress towards an achievable learning goal. In addition, it enabled the learners to analyse their own communicative needs as a result of understanding how the language is structured and used for communication. The last component dealt with raising awareness of their stocktaking of their education and the effort made in respect of their own learning, advocating the right attitudes and motivation to learning.

Thus, the relationship between learner training and learner involvement is that 'learner training has an enabling function within a learner-centred approach to teaching by helping learners to acquire the knowledge and skills they need in order to

assume a self directive role in their language study'. (Tudor 1996a: 40-41). Tudor goes on to say that learner training has another, perhaps more sophisticated use in that a forum can be created where 'the teacher can get to know her students as language learners and thereby initiate the sharing of knowledge and insights between teacher and learner out of which the learners' subsequent involvement in the shaping of their study programme will grow' (ibid: 41). This concept allows this research project to use PA methods to enhance learner-centredness in order to put learner training and learner involvement into practice. They share the common ground of taking learners' needs and social context into account in order to empower them and help them take action to solve their own problems. Further, learner training initiates reflective learner involvement as it engages an individual learner personally. It also involves all of the learners and the teacher, or the class as a whole, through discussion and negotiation, allowing participants to express their thoughts within a mutually communicative environment, due to shared concepts and language. Thus it is necessary that learner training should be integrated into day-to-day teaching activities in order to help learners acquire personal insights into language learning as well as the available learning options. The more integrated the learner training is, the more the learners are assumed to directly transfer potential insights into their own language learning.

2.2.3.4 *Learner training*

What are the connections between learner centredness and learner training?

We need to take into account the learning content, explicitness of purpose, integration and evaluation.

The content of learner training covers cognitive and metacognitive strategies (Wenden 1986c). Cognitive strategies operate directly on incoming information,

manipulating it in ways that enhance learning (O'Malley and Chamot 1990: 44). They are specific learning skills closely related to certain learning tasks for problem solving (Rubin 1987) such as inferring the meaning of unknown words by using contextual clues or background knowledge.

Metacognitive strategies or self-management strategies are general learning skills involving how the learners plan, monitor and evaluate their own learning (Rubin 1987; O' Malley and Chamot 1990; Wenden 1991). These two types of strategies complement each other. Metacognitive strategies as general learning skills develop out of learners' awareness of their learning goals and insights into language learning such as reading extensively to get a feel for the language before moving to productive skills such as speaking or writing. Thus, it is essential to help learners develop both types of strategies or learning skills.

The purpose of learner training in relation to learning strategies should be clearly and explicitly stated to help learners perceive their relevance. For instance, it is necessary that the learners fully understand why these strategies are needed and what the learners can expect as an outcome. The learners should be allowed to assess the strategy in light of their learning objectives so that they are simultaneously able to evaluate how well they could use it. This will encourage them to manage their own language learning.

The process of strategy training and the process of learners assessing their own ability should be integrated into the process of developing the learners' ability to assume an informed and self-directive role in their language learning. In this way, learner training will help the learners to develop their insights and become more independent language learners.

PA approach integrates all of these points through the collaboration between the facilitator and the participants, who were trained through active engagement in every stage of their local from planning to implementation and evaluation.

The success of learner training in a learner-centred approach depends on how well the teacher selects the learning content to suit the purpose of the training based on the learners' cultural background, prior learning experiences and expectations in the planned learning activities via learners' participatory appraisals. This includes how well the purpose of the training is perceived by the learners so that they could assess their own ability against the purpose of the training. In order to achieve this goal, the learner needs to acquire and practise necessary learning strategies to be presented in the next section.

2.2.3.4.1 Learning Strategies

As learning strategies are closely related to learner training, some learning strategies and examples of acknowledged and accessible learning strategies in current language learning are reviewed.

‘There is no complete agreement on exactly what the strategies are, how many strategies exist; how they should be defined, demarcated, and categorised; and whether it is – or ever will be possible to create any real, scientifically validated hierarchy of strategies’ (Oxford 1990:17). Learning strategies enable the teacher and learners to analyse the learners' learning processes as embedded in various pedagogical options. Yet, Oxford's definition for learning strategies is ‘specific action taken by the learner to make learning easier, more enjoyable, more self-directed, more effective, and more transferable to a new situation’ (op.cit.: 8). Learning strategies in this research study refer to ‘the purposeful actions learners engage in (either

consciously or unconsciously) with the goal of promoting their understanding of or proficiency in the target language' (Tudor 1996a: 202).

Learning strategy analysis, Oxford (op.cit.: 17-21), divides learning strategies into two main categories: direct and indirect strategies. Direct strategies involve specific ways in which the learners manage the target language learning, including three major sub-categories: 1) memory strategies to store and retrieve new information e.g. by creating mental linkages such as association, 2) cognitive strategies to understand and produce new language e.g. by practising as in repetition and 3) compensation strategies to solve problems, e.g. by guessing intelligently as when learners use contextual clues. Indirect strategies concern learners' general management of their learning and have three main sub-categories: 1) metacognitive strategies to deliberately organise learning process e.g. arranging and planning one's learning as when setting goals and objectives, 2) affective strategies to adjust attitudes, motivation and emotions e.g. by encouraging oneself by the use of rewards and 3) social strategies to interact with others effectively for language learning purposes e.g. by cooperating with, for example, peers or native speakers. These strategies interact with one another.

Similarly, O' Malley and Chamot (1990: 137-139) offer three categories of learning strategies: metacognitive, cognitive and social/affective strategies (see section 2.3.3.4). Their explanation is more detailed but shares common ground with Oxford's learning strategies. Their metacognitive strategies are similar to Oxford's indirect metacognitive strategies, as they cover how the learners plan their overall language learning, prepare and monitor tasks and evaluate their own performance, such as problem identification and self-evaluation. These are also comparable to the

three stages of Wenden's self-management strategies: planning, monitoring and evaluating (Wenden 1991: 25-29). O' Malley and Chamot's cognitive strategies are comparable to Oxford's direct strategies but contain more specific details of how learners interact with their target materials and situation, how they operate with their choice of materials and learning techniques such as transferring and inferring. Their cognitive strategies were also relevant to Rubin's six cognitive strategies: clarification/verification, guessing/inductive inferencing, deductive reasoning, practice, memorisation and monitoring (Rubin 1987:23-25). Social/ Affective strategies are equivalent to Oxford's indirect affective/social strategies relating to how learners interact with others to develop their language learning effectively, based on the proper control of affective factors such as cooperating and self-reinforcement.

Holec (1981) proposes that these learning strategies should be employed in order to create greater potential and a varied form of strategy-rich learning environment, where the learners are encouraged to test their learning preferences based on their own appraisal. This will help deepen and widen learners' insights into language learning by empowering them to develop their self-directive abilities, as metacognitive strategies are referred to the skills required for self-directed learning (Holec 1981: 14-19).

In this research study, the learners were helped to develop these learning strategies through all of the seven PA methods used and in each reading activity. For instance, metacognitive strategies underpinned the methods of Matrix Scores of priorities and Well-Being Ranking, helping the learners in planning their learning, organising and examining their tasks, as well as assessing their own performance. Further, cognitive and affective/social strategies were promoted through the PA methods focusing on learner empowerment, such as brainstorming/semi-structured discussion and reading

activities, especially reading for pleasure. Within these PA methods, there is the ‘deconditioning’ process (ibid: 22) concerning the psychological aspect of learners not only to help them change their prejudices about learning languages and their roles as language learners but also to enable them to be more confident to learn on their own. One of Holec’s suggested methods to enable the learners to become more independent is learning to analyse their own performance. The learners were encouraged to exercise all of these learning strategies in all learning processes in order to assist them to develop their own learning based on their own needs effectively within a learner-centred approach (see sections 4.2 and 5.2).

2.2.3.5 *Learner involvement*

During the process of learner training, the learners need to be prepared in both strategic and attitudinal aspects to be initiated into the language learning process. Gradually, learner training merges into ongoing learner involvement in the choice and evaluation of day-to-day learning activities. Thus, in order to foster learner involvement, opportunities for learners to actively participate in decision-making must be available. Through the learner training and learner involvement processes, the learners can widen and deepen their insights into language learning and actively participate in shaping their language study. In this way, the learners are empowered, as the prerequisite of language education, to develop their informed judgement with open learning options. Whether they want to adopt a self-directive mode of learning and thus become more independent learners is for them to decide. Tudor (1996a) suggested four main aspects of fostering learner involvement are methodology, materials, tasks and activities and self-assessment.

Methodology: In order to encourage learners to be actively involved in their learning process, choices of methodology should be flexible and adaptable to the learners' subjective needs via learner empowerment. This will help the learners to develop language-learning insights in order to function self-directively in their own learning process. Thus, an approach to course design should be 'structured not only around the attainment of certain objective learning outcomes but also around the initiation and exploration of a range of learning processes' (Tudor 1996a: 197). In other words, methodological choices must take into consideration both objective learning outcomes and the creation of strategic learning potential in day-to-day teaching-learning activities. Attempts to achieve this goal in terms of an approach to course design have been made. Particularly in Language for Specific Purposes (LSP), three approaches to ESP course that focus on addressing learners' needs are proposed. They are: 1) a language-centred approach (Munby 1982), 2) a skills-centred approach (Brumfit 1984), and 3) a learning-centred approach (Hutchinson and Waters 1987). The first approach focuses on the nature of the target situation in designing an ESP course, the second emphasises the process enabling the target performance, and the third prioritises the way in which learners acquire the competence which enables them to achieve the target situation performance. Hutchinson and Waters (1987) proposed the third approach, pointing out that the needs analyses of the first two approaches are merely the analysis of linguistic data from the target situation; they do not emphasise the learning process as a means of helping learners to achieve the target situation performance. However the third option, the learning-centred approach, does not provide a methodology for involving the learners in the learning process but simply proposes the idea of involving them.

In order to effectively foster learner involvement in the learning process, assuming a methodology of communicative teaching with the emphasis on the learning process is not enough. The educational goal, i.e. learner empowerment, must be emphasised to enable them to manage their self-directive learning. This is because learning is or should be a life-long process. The learners need to be able to develop independent learning so that they can pursue their learning outside the formal classroom context. Thus, a learner-centred approach is required, focusing on learner empowerment.

Materials: Learner involvement can be fostered by including the learners in adapting teaching materials to best suit the learners' needs, interests and current language ability. Active learner involvement will grow out of engaging learners' interests in material adaptation due to these methodological notions: 1) learner commitment, 2) learner as materials writer and collaborator, 3) learner as problem solver, 4) learner as knower and 5) learner as evaluator and assessor (Clarke 1989: 135). Thus, this constructive process entails high quality learner involvement, as the learners are able to widen their understanding of language learning and develop their self-directed learning. This concept is exemplified in the activity of reading for pleasure in both the pilot and the main study (see sections 4.2 and 5.2).

Tasks and activities: A wide choice of tasks and activities should be provided in order to foster learner involvement. Littlejohn (1985: 260) suggests that 'if we wish to involve learners more in the running of a language course, then we need to devise tasks and materials that specifically develop the learners' ability to choose. Such tasks could involve learners in thinking more deeply about what they need to study and how they need to study'. More importantly, these tasks and activities should grow out of

learners' participatory appraisals via discussion, negotiation and consultation with the teacher. This will help the learners achieve the above-mentioned goal, i.e. deepen their insight into what and how they need to learn. This idea is also put into practice in with the implementation of PA methods (see sections 4.2 and 5.2).

Self -assessment: Self-assessment is vital to the active and reflective involvement of learners in their language learning. The teaching and learning process consists of setting goals, monitoring the learning process that aims to achieve these goals and assessing whether the goals are attained or not. This cycle is once the assessment is carried out. In order to develop their own learning, the learners need to be able to undertake these three stages. Thus, involving learners in self-assessment is essential in helping them to manage their own learning in terms of setting their own learning goals and monitoring their own progress. Self-assessment serves the ultimate language-educational goal of the learner-centred approach, i.e. to empower the learners in order to enable them to pursue their language-related life goals in an informed and self-directive manner.

The three major areas that the learners need to be able to assess in order to manage self-directed learning successfully are: 1) the communicative and linguistic demands of their target situations of use, or what they will need to do in the language based on target situation analysis, 2) their current abilities with respect to these demands, or what they can currently do based on present situation analysis, and 3) the practical learning options that are available to them as a means of attaining their goals and their subjective interaction with these options, or how they can best attain their desired learning goals in the light of the learning options available to them, their subjective needs, and individual learning preferences based on strategic analysis

(Tudor 1996a: 162). Involving learners in self-assessment in these three main areas can achieve extremely positive results in terms of learner involvement in language learning, as it empowers the learners to take an actively self-directive role in their both during and after the language course.

Tudor puts these three areas into the task-based self-assessment which is integrated in the process of ongoing learner-based needs analysis as a developmental and experimental process. This helps the learners identify their specific communicative needs and intentions during the course and also involves them in reflecting on their language and communicative abilities in order to set their learning goals. He also showed how to involve learners in the learning process through these five task-based, self-assessment activities:

1. Exploring expressive intentions and resources: learners identify target situations and draw up a list of communicative functions needed and the resources involved, such as pragmatic mapping of a university library, with the structures and vocabulary needed for this purpose. Generating a pragmatic map helps raise the learners' awareness of the development of their self-directive abilities.
2. Analysing difficulties: learners pool their practical experiences of a specific situation focusing on goals and difficulties such as using a telephone in the target language. This activity enables the learners to analyse their language use and their difficulties.
3. Simulation-based self-assessment: learners have a chance to practise the target language by carrying out such activities as job interviews. This

helps them to plan real-world interviews based on their assessment of their own performance and the teacher's feedback.

4. Peer evaluation: Peer-assessment can be used to inform self-assessment in relevant activities such as interview simulation or seminar presentation as it reflects other learners' abilities with respect to a shared goal. Discussion and correction at the feedback stage leads to the development of the learners' self-directive learning ability.
5. Negotiative assessment: learners discuss and negotiate with the teacher about an achievable target, its performance criteria and expected degree of achievement, which is applicable to the learning goals of the whole course. Through negotiation regarding the ultimate goal of learning, the development of learners' ability to approach their language use and language learning in both an informed and self-directive manner is an expected outcome of this activity (Tudor 1996a: 179-183, adapted).

All of the principles underpinning these activities were integrated in all seven PA methods (see section 2.2.4.3) used in this research study, to increase active and meaningful learner involvement in the learning process.

Since self-assessment involves transferring the teacher's responsibility to the learners, it is essential to raise the learners' awareness of learning goals, the linguistic and pragmatic realisation of these goals and the methods and criteria of evaluation. To integrate self-assessment into the course design, the teacher needs to understand the value of the learners' perceived language ability when they provide information about their learning needs and current language ability. The degree of the learners' involvement in self-assessment depends on their motivation and awareness of their

implicit responsibility for their own learning. Thus, learners need support to gradually become involved in self-assessment. The learners' culturally based attitudes and personal experience have to be taken into consideration in the self-assessment process as they affect its objective reliability, as shown in the studies of Thomson 1996; Cariaga-Lo et al. 1992; LeBlanc and Painchaud 1985; Jenssen-van Dieten 1989; Blue 1988; Lee 1981; Oskarsson 1989 and Bachman and Palmer 1989 especially Wongsotorn (1981), who investigated self-assessment of English skills by undergraduate and graduate students in Thai universities.

As self-assessment is a means to enable the learners to provide a meaningful level of input to present situation analysis, it should be closely linked to achievable learning goals and activities. It should be integrated into the wider context of learner involvement throughout the course, because it is a part of the transferring of responsibility from teacher to learner. Thus, self-assessment is not only a part of learner training and learner involvement but also of goal-setting and needs analysis, since the learners' subjective needs analysis need to be taken into account as well as their culturally-based expectations and classroom culture.

One of the most relevant studies to this research project is the work of Oskarsson (1989: 37-45) who suggests four self-assessment formats:

- 1) partial skills description + self rating scale,
- 2) situation outline + partial skills description + self-rating scale,
- 3) expanded skill description + self-rating scale and,
- 4) situation outline + task specification.

These four formats range from the simplest to the most detailed. For instance, in the first format, partial skills description, the learners simply rate their own perceived performance between the two extremes of the target performance, such as “I cannot speak English at all” and “I am completely fluent in English”. At the opposite end of the spectrum is the fourth type of format, situation outline + task specification, to indicate Threshold Level (Van Ek 1975), that is, ‘the minimal level of language proficiency which is needed to achieve functional ability in a foreign language’ (Richards, Platt and Platt 1992:380). The learners need to tick twenty-five tasks that they were able to perform in the target language. As each of the formats has its own weaknesses (e.g. the first format lacks information appropriate at intermediate level) the learners should be encouraged to discuss their self- ratings in functional terms particular to their own situation, to elicit their perceived view of their current abilities and learning goals in detail. This concept was adapted in the research study in the activity of reading for pleasure both in the pilot and main studies, where the learners were asked to assess their own perceived reading ability (see sections 4.2 and 5.2).

Oskarsson (1989: 3-5) points out six powerful educational functions of self-assessment for language learners: 1) promotion of learning, e.g. fostering both learners’ critical thinking about their own competence and an informed and intelligent attitude, 2) raised level of awareness, e.g. generating a more insightful and independent attitude to assessment, course content and learning options, 3) improved goal-orientation, e.g. fostering learners’ creativity within wider learning aspects such as a variety of attainable goals and various forms of participation in learning activities, 4) expansion of range of assessment, e.g. generating learners personal insights into their own language competence, 5) share assessment burden, e.g. sharing

and transferring some responsibility from the teacher to the learners themselves and 6) beneficial post course effect, e.g. fostering independent learning as a transferable skill.

Self-assessment plays a prominent role in helping learners to develop their self-directive abilities by generating their awareness of their ultimate learning goals, entailing setting achievable goals, based on their evaluated or perceived current language ability. This leads to an ability to plan their own learning activities to achieve goals in an informed and self-directive manner. However, in order to help the learners to achieve this goal, their attitudes and motivation need to be improved.

2.2.3.6 *Learner-centredness: attitudes and motivation*

In order to establish objective learning goals through shared exploration by teachers and learners in a learner-centred approach, serious personal commitment from both parties is needed, especially if the learning goal is to help the learners achieve greater independence. It is therefore necessary to help learners improve their motivation for learning, as this is closely related to promoting learners' independence (Dickinson 1995). Dickinson states that 'it has been shown that there is substantial evidence from cognitive motivational studies that learning success and enhanced motivation is conditional on learners taking responsibility for their own learning success and failures are to be attributed to their own efforts and strategies rather than to factors outside their control' (Dickinson 1995: 173-174). Thus, the learners' motivation needs to be initially assessed to help the teacher discover the nature and intensity of the learners' desire to learn the language. This gives rise to an improvement in learners' motivation based on their reasons for learning and attitudes to the target language and to the process of learning.

As attitude to language learning is claimed to be one of the main factors influencing learners' motivation, it is necessary to show how it relates to motivation. Three main categories of learner attitudes are identified by Wenden (1987), based on learners' views of how language should be learned. They are summarised as: 1) constant use of the language, 2) learning about the structure of the language and 3) the importance of personal factors. The first category prioritises the use of a language for communication and social interaction as in the practice of using the language as much as possible. Wenden's findings show that learners who hold this attitude to language learning prefer to use communicative strategies to negotiate meaning. The second category views language as a system to be learned through conscious intellectual effort, as in learning grammar and vocabulary. Learners with this type of attitude favour cognitive learning strategies such as practising language structures. The third category emphasises the affective interaction of the learner with the target language and the learning process, hence the perceived importance of emotional aspects, i.e. focusing on effective learning activity to encourage learner involvement. Learners with this attitude to language learning place more stress on their emotional reactions in interactive situations rather than any specific learning strategy. These three types of attitude to language learning lead to the application of different methods to motivate language learners, by allowing them to exercise their preferred learning to suit their own needs. Tudor (1996a: 53) suggests three ways to put this concept into practice through the process of learner training: 1) reviewing and evaluating learners' current beliefs about language learning, 2) exposing alternative approaches and options to the learners and 3) guiding the learners as to how to explore these options.

Gardner and Lambert (1972) suggest that integrative motivation - motivation arising from affective interest in the target community in order to assimilate into it -

has a more positive effect on success in language learning than instrumental motivation - motivation to learn a language for potential pragmatic gain such as academic or professional advancement. However, this view of motivation is criticized as too narrow to account for other factors influencing attitudes to language learning, such as the second language and foreign language acquisition learning contexts. Learners' attitudes to the target language in a second language acquisition context where learners have plenty of direct contact with target language speakers are different from those in foreign language learning contexts where learners have insufficient or no direct contact with native speakers. Dornyei's seven motivational/ attitude variables -instrumentality, desire to spend time abroad, interest in foreign languages and cultures, desire for knowledge and values associated with English, language learning as a new challenge, need for achievement and bad learning experiences (Dornyei 1990)- reflect the various complex factors that influence motivation in language learning concerned with the target language community, the purpose of language use, learners' needs for achievement and intellectual interests.

With respect to a learner-centred approach, learners' motivation can be investigated in three areas: 1) functional goals, i.e. what learners want to do with the target language, 2) attitudes to the process of learning, i.e. whether the learners learn the target language voluntarily or by obligation and 3) practical investment, i.e. whether the learners are willing to invest time and effort in language learning (Tudor 1996a)

Although it is unlikely to be possible to quantify and improve motivational intensity in the space of a few hours, PA methods allow one to establish a realistic mode in which to do this throughout the course by using awareness-raising activities related to the three areas listed above (see sections 4.2 and 5.2). The methods used are

based on addressing both future and immediate needs of the learners through negotiation between the teacher and learners. The promotion of learner empowerment through a participatory appraisal approach that increases the meaningful involvement of the learners in the learning process is expected to help improve their attitudes and motivation, thus helping them achieve, their language learning goals.

As it has been stated earlier that both ESP and the learner-centredness promote learners empowerment through catering their needs. Thus, the following section will discuss about needs analysis.

2.3 Needs Analysis

The discussion of needs analysis here will focus on an analysis of learners' needs when planning a course in terms of methodological selections, to address the real needs of the learners during the learning process. Thus, the rationale for alternative needs analyses will be discussed first, followed by types of needs analyses and their applications.

2.3.1. Rationale for alternative needs analysis

Needs analysis has played a prominent part in course design, especially with regard to language for specific purposes (LSP) such as English for Specific Purposes (ESP) or English for Academic Purposes (EAP), subdivision of ESP. There are many leading examples of employing needs analysis in course design which all advocated the use of learner needs analysis to make the teaching responsive to the learners' needs as in the work of Munby (1978), Mackay and Mountford (1978), Robinson (1980, 1991), Widdowson (1983), Yalden (1983), MacDonough (1984), Bloor and Bloor (1986), Hutchinson and Waters (1987), White (1988), Brindley (1989) Nunan (1988a and b), West (1994) and Dudley –Evans and St. John (1998). However, when a learner-centred approach is advocated in an ESP situation, there is no model of

teaching and learning methodology available to enhance this approach although Robinson (1980,1991), Hutchinson and Waters, (1987), Holme (1996) Richterich (1987) paid lip service to the idea of unfolding or changing needs. Hutchinson and Waters (1984: 112) criticised the conventional needs analysis in the ESP course, commenting that:

‘ESP is often seen as the best example of communicative teaching in that it is supposedly closely geared to students’ needs. However, we feel that needs analysis has been far too narrowly interpreted, implying in effect, little more than the analysis of linguistic data from the target situation’.

Hutchinson and Waters (1987) suggest that ESP cannot utilise a learner-centered approach because external directives and the expertise of a needs analyst are required. They argue that ESP focuses on the process of learning itself rather than on the learners, whereas a focus upon the learners reflects the idea of the learners themselves being actively involved in needs analysis. This leads to learner empowerment as the ultimate educational goal of learner-centredness in order to help learners become more independent.

Hutchinson and Waters (ibid) configured a more learning-centred approach that supposes a student response to the understanding of their needs. However, they do not really show how the needs analyst could get the learner to understand their needs. They do not tackle the very difficult issue of differentiating needs and wants or the difference between the learners’ perception of their needs and that of the analyst. Tudor (1996a), in advocating a learner-centred approach to needs, stressed the importance of treating the subjective needs of the learners as an ongoing process and suggested an explorative approach to this. However, his suggested activities did not show how to respond to the fluidity of the learning situation as a whole.

PA was not developed for the classroom but was a mechanism used in rural development. The researcher's interest in the PA approach is in learning how to empower a given population so that it is they who can analyze their own needs. Furthermore, these PA methods assume that needs are iterative. They do not sample the feelings of a community at one time then go forward from that point. They help the community fashion the appropriate response to whatever scenario unfolds, so that by so doing they will uncover further needs. Development is treated as continuous, so the method is ultimately not the discovery of some developmental goal but an induction into the process of development itself.

2.3.2 Types of needs analysis

Generally, according to Tudor (1996a), there are two operational stages in a needs analysis procedure in the learner-centred approach. The first stage of needs analysis is usually done by a teacher or other expert such as a course designer prior to the start of the course or at its very beginning. This expert-driven form of needs analysis has the purpose of setting a general framework of course objectives, based on information gathered from the learners' target situations of use. The target situation is analysed according to facets of its register or way of using language (Munby 1978 and 1984, Chambers 1980, Richterich and Chancerel 1980 and Dudley-Evans and St. John 1998). More recently the target situation is perceived as a context that structures communicative events according to a certain pattern. These patterns impose varying restrictions upon the choice of language.

However, such a traditional approach to needs analysis is limited in identifying the learners' specific communicative target needs and their intentions. As a result, a second complementary stage of needs analysis is called for. This more detailed and learner-based form of needs analysis usually occurs during the course, as it 'involves

the collaborative exploration of learners' communicative agenda by both teacher and learners as an integral part of ongoing learning activities. This second stage of needs analysis is thus developmental and experimental in nature, and arises out of the growth of learners' ability, their understanding of their target situations of use and of their own communicative goals and intentions.' (Tudor 1996a: 179). However, there has not been research into this type of needs analysis within a dynamic learning process. That is why PA methods have been employed in this research project in order to define and identify learners' needs and incorporate them into course design in an ongoing process (see section 2.2.3).

Two stages of needs analysis operation lead to two types of learners' needs analysis i.e. objective needs analysis and subjective needs analysis, in the first and second stage of needs analysis respectively.

2.3.2.1 Objective needs analysis

Objective needs analysis means the analysis of the explicit functionally oriented needs of the learners. This can be done in the absence of the learners by the teachers or outsiders such as course designers, course developers, or sponsors. These people diagnose the learners' needs on the basis of data on their language proficiency and pattern of language. They provide an analysis of the target communicative situation the content specifications of which the learners are expected to have mastered by the end of the course (Richterich 1972; Brindley 1984; Nunan 1985). As this analysis focuses on the learners' needs in their target situation after completing the course, it is known as target situational needs analysis (Chambers 1980; Robinson 1991; Munby 1978).

2.3.2.1.1. Target situation needs analysis

Target situation needs analysis is one type of objective needs analysis. This type of needs was considered 'necessary' by Hutchinson and Waters (1987:55) as it is 'determined by the demands of the target situation, that is, what the learner has to know in order to function effectively in the target situation.' This is the analysis of real-world functional needs of the learners in ESP course design (McDonough 1984; Robinson 1980,1991; Hutchinson and Waters 1987).

In order to design a course, it is not sufficient merely to know what the learners need to learn to function effectively in their world. That is it is necessary to know where they are starting. The learners may not be ready or able to learn effectively, due to many factors, such as their present level of language ability and their immediate personal needs. The procedures of objective needs analysis developed within communicative language teaching (Munby 1978) were argued to be impractical for teachers in general. The definition or the term 'needs' is too flexible (Widdowson 1984). They were too idealistic and theoretical (McDonough 1984). More importantly, they were 'only superficially learner-centred' because they favoured 'data about learner, rather than incorporating data from the learner' (Nunan 1988a: 24). If the needs analysis puts too much emphasis on language skills, learners are considered as language users rather than language learners (Waters and Hutchinson 1987). Further, learners' target situation needs are difficult to define: they depend upon the situation of the needs analysis. For example, the needs of the learners may not be the same as those of the institute or the subject teachers as 'needs analysis is likely to be influenced not only by the demands of the learners themselves, but by their sponsors, the learning situation, or even by political and governmental considerations' (McDonough 1984: 37). More importantly, they develop and change

throughout the course. Therefore, the target needs analysis as a pre-course needs analysis is not sufficient to cater for the real needs of the learners.

Similarly, PA approach arose out of dissatisfaction with an expert-driven needs analysis which failed to create sustainable development because the real needs of rural people were not recognised (Jones 1996; Chambers 1997; Archer 1994; Pretty et al., 1995 and Hamilton et al., 1998). Thus, other complementary types of needs analysis are needed for ‘triangular interrelations’ (McDonough 1984: 38): the result of negotiation with all who are involved in needs analysis such as learners, sponsors and teachers or, in the PA approach, experts in rural development. This leads to present situation needs analysis.

2.3.2.1.2 Present situation needs analysis

Present situation needs analysis is another type of objective needs analysis. Robinson (1991:9) says that ‘ a present situation analysis seeks to establish what the students are like at the start of their language course, investigating their strengths and weaknesses’. The sources of information are the learners themselves, their language-teaching establishment and their user-institution (Richterich and Chancerel 1980). This type of needs analysis helps to determine the present level of language ability of the learners, their attitudes toward language learning and their sources of information and other factors relevant to the specific course design. It is considered as a constraint on the target situation needs, as in the work of Munby (1984) or ‘lack’ in the work of Hutchinson, Waters and Breen (1979). Hutchinson and Waters (1987:56) related the ‘lack’ to the ‘necessities’ by saying that ‘the target proficiency needs to be matched against the existing proficiency of the learners. The gap between the two can be referred to as the learners’ lacks’.

In relation to the PA approach, the present needs analysis is carried out through methods such as daily schedules, transect walk and cause and effect diagrams (see section 2.2.3) in order to investigate the potential of a new project in relation to the availability of local people's manpower, resources and time. This process directly involves the local people so that it helps indicate whether or how much they could contribute to the proposed project.

Yet, in the classroom situation, target situation and present situation needs analyses are mainly perceived by outsiders rather than the learners themselves. The implementation of these types of needs analyses usually occurs once, before or at a very early stage of their studies, though the needs of learners keep changing. It is also difficult to realize the learners' real needs through procedures and tools, to collect data with questionnaires, interviews, tests or observation without the active involvement of the learners themselves in the process of needs analysis. This leads to the criticism that there is insufficient use of the learners' own knowledge and insights into their learning goals.

Thus a needs analysis which takes the weaknesses mentioned above into account, that is, one in which the learners participate directly, is called for.

2.3.2.2 Subjective needs analysis

Subjective needs are 'what the learner needs to do to actually acquire the language'. This is the procedure-oriented aspect of needs and, related to transitional behaviour, the means of learning.' Objective needs are 'what the learner needs to do with the language once he has learned it'. This is the goal-oriented definition of needs and relates to terminal behaviour (Widdowson 1981:2). In a learner centredness paradigm, objective needs analysis is the first stage but the subjective is the second, involving the collaborative exploration by both teacher and learners of the learners'

communicative needs in their language study. The subjective needs analysis is in the form of an experimental and developmental process growing out of the learners' own exploration of their communicative needs and of their learning process. The subjective needs analysis influences learners' motivation so that it affects the effectiveness of the learners' learning and their effective involvement in their learning process. Similarly, objective needs, related to target uses of the language learnt, enable the productive outcome of the learning if its analysis is responsive to the learners' objective needs. Thus, both objective needs and subjective needs are important for the effectiveness of the language programme.

Subjective needs are unpredictable and change throughout the course while both teacher and learners experience different kinds of dynamic interaction in the teaching and learning process. This is supported by Brindley (1989: 70) who defines subjective needs as '... the cognitive and affective needs of the learner in the learning situation, [and can be defined] from information about affective and cognitive factors such as personality, confidence, attitudes, learners' wants and expectations with regard to the learning of the [TL] and their individual cognitive style and learning strategies.' The complicated and elusive nature of these strategies means it is necessary to observe and analyse subjective needs in the situation to understand them.

Subjective needs are considered as 'wants', which means 'what the learners want or feel they need' Hutchinson and Waters (1987: 56-57). The learners may or may not realise their 'necessities' and 'lacks' as perceived by others such as authorities, sponsors, course designers or the teacher, but their wants may not be the same as those described by these others. It is necessary to meet the learners' wants as this directly influences their motivation in learning. Thus, an alternative needs analysis which can address both objective and subjective needs in an ongoing learning

process is called for, to help the learners realise what they need to do with the language in their target situation and how they could achieve that goal. This gives rise to the use of PA methods as analytical tools to explore both learners' objective needs (their target situation needs) and subjective needs (their learning needs) as an ongoing learner-based needs analysis.

2.3.2.3 Learner-based needs analysis

Learner-based needs analysis arises out of the requirement for a needs analysis to enhance the learner-centred approach. As this approach takes into account the different beliefs and attitudes that learners bring to the learning situation, this leads to an approach to needs analysis which assumes that the learners will gradually understand their own needs as the course progresses. Collaboration between the teacher and the learners is needed to help raise awareness of the learners' own needs and how to express them. As learner-based needs analysis develops over time, it should be carried out in terms of self-discovery and an ongoing explorative process of learning. Thus, learner-based needs analysis completes and improves the initial needs analysis over time, as Brindley (1989:77) states:

'in a learner-centred system, needs analysis and setting of learning objectives is not something which happens only once at the beginning of the course. It is quite unrealistic to expect learners to be able to participate fully in such an enterprise at this stage for the simple reason that people can't make a valid choice until they have experienced whatever options are being offered'.

It is important that this perspective on needs analysis is realised. Learner centredness offers a form of experimental or experiential learning. It takes immediate personal experience as crucial, as it incorporates the learners' own knowledge and experience into the formulation of the learning goal. Also, its methodology is geared

to learners' subjective needs. However, how it responds to the fluidity of the learning situation and helps the learners achieve a sense of learning independence is still relatively unexplored in the available literature. Although Tudor (1996a) suggests some general activities to realise this learner-based needs analysis which include both target needs analysis and present situation needs analysis, there is no clear connection between those activities to build into the learning process. What matters in this suggested approach to needs analysis is as much the learners' awareness of their own needs as the needs that the analyst identifies with supposedly objective methods. Thus methods to help raise the learners' awareness of both their target situation and learning needs are called for. In achieving this goal, this research project used PA methods to enhance the learner-centred approach through involving learners in assessing both the objective demands of their given or target situation of use and also their current abilities with respect to these expected demands.

PA methods (see section 2.2), although evolved to target wider development initiatives, have within them the capacity to let a community find their own voice, and where learners are treated as that community then it is they who can understand and articulate their interests. This could counter the criticism that the learner-centred approach is impractical in institutional settings, as pointed out by Hutchinson and Waters (1987). PA methods were intended to help learners to identify their own needs, and to set their own goals within their cultural and institutional context. The learners can then be regarded as owning these goals and hence as being independently motivated by them. The PA methods' common ground with the goal of learner empowerment is their focus upon helping the subjects understand their context and the process of personal and community development within it. Personal and community development are treated as one and the same thing. The individual

achieves their personal goals by perceiving them as part of a wider community agenda. There is therefore a tacit emphasis upon co-operative activity, or in the language learning case, upon the formation of effective learning groups that seek the autonomy of those who comprise them. These methods help maximise learners' learning potential, based on an understanding of the process of language learning through learner empowerment, as the ultimate educational goal. The methods give learners an active role in participating in decision-making in respect of their own learning, within a sensible and available teaching and learning situation through negotiation and consultation with the teacher and fellow learners. Both processes of learner training and learner involvement are integrated within PA methods.

To accommodate learner-based subjective needs analysis in the learning process, two perspectives on subjective needs should be taken into consideration: individual differences and learning styles.

2.3.2.3.1 Individual differences

Individual differences affecting how the learners learn a language and their preferences for learning activities are proposed to be: 1) introversion-extroversion, 2) tolerance of ambiguity and risk taking, 3) anxiety and self-esteem, and 4) cognitive styles (Oxford and Ehrman 1993; Skehan 1989 and Wenden 1987). The fundamental factors underpinning these variables are: 1) the psychosocial: 'learners' psychological and effective reactions to the interpersonal aspects of language study, 2.) The cognitive: learners' ways of organising their experience of the world (in the present context, of language and of language learning) and how they prefer to learn.' (Tudor 1996a: 101). These factors are proposed to affect learners' perception of and interaction with the learning process and the formation of their preferences in learning activities. For instance, an extrovert might prefer a communicative type of learning,

while the introvert might tends to favour a systematic form of learning, prioritising grammar and vocabulary. A learner with little or no tolerance of ambiguity and risk taking prefers a highly controlled and sequenced learning approach. In relation to anxiety and self-esteem, learning a foreign language can cause anxiety and can affect self-esteem as learners may not be able to express themselves as well as they wish. So, it is claimed to be important to create the right learning environment to minimize anxiety and maximise self-esteem. Cognitive style includes a complex set of processes involving how learners process information, organize their judgements and interact with their environment.

The cognitive styles that distinguish individual learners from one another have been characterised differently by researchers such as Willing (1988), Witkin (1965), Witkin et al. (1977), Kachru (1988), and Hartnette (1981). For instance, cognitive functioning, which can reflect learners' perceptual intelligence, personality and social domains is based on a series of contrasts: simultaneous/synthetic vs. sequential/successive, holist vs. serialist, impulsive/global vs. analytic/reflective, holistic vs. analytical; also, analytical (Field Independent; FI) vs. concrete (Field Dependent: FD) in terms of:

- 1.) Information processing e.g. FI: tendency to show traits of introversion (the person's mental processing can be strongly activated by low-intensity stimulus; hence dislikes excessive input) vs. FD: tendency to show traits of extroversion (person's mental processing is activated by relatively high-intensity stimulus; therefore likes rich, varied input)
- 2.) Learning strengths e.g. FI: likely to set own learning goals and direct own learning; but may well choose or prefer to use – for own purpose – an authoritative text or passive situation vs. FD: less likely to direct own

learning, may function well in quasi-autonomy (e.g. ‘guided discovery’) but may well express preference for a formal, teacher-dominated learning arrangement, as compensation for their own perceived inability to structure.

- 3.) Human relations e.g. FI: self-esteem is not ultimately dependent upon the opinion of others vs. FD: learning performance much improved if group or authority figure gives praise. (Willing 1988: 41, 50-51)

These cognitive styles vary in degrees in each individual depending on the particular situation. Understanding the learners’ cognitive styles in order to incorporate these insights in teaching helps enhance their learning experiences. In this research study, the individual differences were taken into account in terms of preferred learning activities, learner based-needs analysis and classroom culture. For example, though there was a variety of learning activities, from individual work to pair, group and whole class tasks, the learners were encouraged to work in small groups based on the semi-structured interviews before the course that revealed that the learners usually helped one another in learning in all subjects. Within the group, the learners allocated work according to individual differences or preferences. This was clearly shown in the presentation of project work in Chapter five. Moreover, according to the classroom culture, to avoid losing face in learning a foreign language, collaboration and support from both the teacher and fellow learners were encouraged in different types of learning activities to boost self-esteem and confidence in learning.

Individual differences are taken into consideration in PA methods in terms of the shifts from ‘creating averages to seeking diversity’ (Jones 1996:13). For example, different types of participants are acknowledged according to their different natures

and local culture e.g. dominant and submissive such as chiefs and subordinates, husbands and wives and government and people. This wide range of sources of information generates multi-faceted perspectives which can triangulate one another to suitably serve the real needs of local people in their own situations.

2.3.2.3.2 Learning style

Nunan (1991:168) defines learning style as ‘any individual’s preferred ways of going about their learning.’ He suggested that individual learning styles are influenced by various factors: personality variables, psychological and cognitive make-up, socio-cultural background and educational experiences. Thus, if teachers and learners themselves know learners’ learning styles, this can lead to discovery and analysis of their learning preferences. The following are some examples of learning styles relevant to choices of methodology. Four learning styles and the most popular activities for each style as discussed by Willing (1988), which Nunan (1991:170) refers to as ‘learner types and their preferences’ are:

- 1.) ‘Concrete’ learning style or type of learner, who prefers learning by games, pictures, films, video, cassettes, talking in pairs and practising English outside class.
- 2.) ‘Analytical’ learning style or type of learner, who prefers learning by studying English books, studying by themselves, finding their own mistakes, working on problems set by teacher and reading newspapers.
- 3.) ‘Communicative’ learning style or type of learner, who prefers learning by watching and listening to native speakers, watching TV in English, talking to friends in English, learning new words by

hearing them, learning by conversation and using English out of class in shops, trains, etc.

- 4.) 'Authority-oriented' learning style or type of learner, who prefers the teacher to explain everything, likes to have their own textbook, to learn by reading, to write everything in a notebook, to study grammar and to learn new words by seeing them.

The PA approach takes learning styles into account through various methods created to accommodate the needs of local people. For instance, with illiterate groups of people, graphics such as diagrams, matrix scoring and maps are widely used to encourage them to express their opinions and needs. The whole family then help one another to produce their own seasonal calendar showing any change in their family way of life occurring on a yearly basis such as employment changes, farming activities, or other modes of intervention. Therefore, PA methods are created to serve learning preferences at any level of literacy and in any way of life.

With the ultimate goal of learner empowerment in mind, learner-centred teaching should stress learners' involvement by exposing the learners to different modes of learning in order to broaden their understanding of learning options available to them, rather than imposing on them a selected methodology coinciding with learners' impulsive preferences. In doing this, teachers need considerable flexibility and educational insight. In this study, as the PA methods emphasise adjusting the attitudes and the behaviour of the facilitator, the teacher applied this principle in order to be flexible with respect to learning styles so as to introduce changes to achieve the goal. Reflection on this leads to strategy analysis.

2.3.2.4 Strategy Analysis

Two main goals in developing a learner-centred curriculum are encouraging learners to develop their language skills and involving learners in the development of their learning skills.

Helping learners to develop their learning strategies is one way to pursue these goals. Nunan (1991:168) refers to learning strategies as ‘the mental processes which learners employ to learn and use their target language.’ This entails strategy analysis as a tool to investigate the learning process within various methodologies. Each learning task and classroom activity possesses some implicit learning strategies. For example, some learning strategies are implied in reading a research paper or article taken from a medical journal and can be potentially elicited, such as analysing overall organization of the paper, for example, ‘introduction, procedure and discussion’ (Hill et al., 1982, cited in Swales 1990: 134), reading for both main and specific ideas, and using contextual clues to guess the meaning of unknown words.

Two examples of strategy analysis, which implement O’ Malley and Chamot’s three categories of learning strategies (metacognitive, cognitive and social/affective) (O’ Malley and Chamot 1990) in classroom activities, are applicable to the strategies analysis in this research study as presented by Tudor (1996a: 210-211, 222-223).

The first example of strategy analysis concerns *learner-based exercise preparation*. The learners are asked to write exercises themselves based on either an example exercise or their prior learning experiences. If each group does a different type of exercise, they can prepare questions for their fellow learners. The teacher could work with the learners providing advice and guidance to each small group. It may be time consuming and difficult -especially initially- if the learners are not familiar with this type of activity. However, the learners are actively involved in their

learning process, which transfers the responsibility from the teacher to the learners. This entails a broadening of the learners' scope for exploratory activity, learning in collaboration with the teachers, and a forum for practical learner involvement aimed at greater independence. The identified strategies are: a) *Metacognitive strategies*: planning and self-management, selective attention, problem identification and self-evaluation; b) *Cognitive strategies*: resourcing, deduction/induction, transfer, grouping and translation; c) *Social/Affective strategies*: questioning for clarification and cooperation.

The second example deals with *a content-based project* leading to an oral presentation. At the beginning of the course the learners are asked to prepare a group-work project on a subject related to their own area of specialisation, which they need to present both in the form of a written report and a formal oral presentation at the end of the course, with some guidance from the teacher. Although the level of content specification is teacher-based, as the teacher has to give approval based on provided criteria, the learners are free to choose their own topics and to organise their presentation. The project highly motivates the learners as it is counted as part of their examination and it also enhances their collaborative approach to learning. The specified strategies are: a) *Metacognitive strategies*: planning and self-management, directed attention, selective attention, self-monitoring (in particular, production, style, plan, and double-check monitoring). All are ongoing processes. b) *Cognitive strategies*: repetition, resourcing, note-taking and summarisation, elaboration (in particular, personal, world, academic, and between-parts elaboration) and translation; c) *Social/ Affective strategies*: questioning for clarification and cooperation.

This research study took the strategy analysis into consideration both in terms of adapting the PA methods and the learning activities. The strategy analysis

underpinned all of the methods and learning activities which were based on the results of initial needs analysis (questionnaires and semi-structured interviews especially with the subject teachers in terms of their expectations of TEP 411 236) and ongoing needs analysis. For example, PA methods were used to solve problems occurring in each step of the learning process in order to allow the learners to use all three types of learning strategies. Also, project work, which is highly recommended for promoting a learner-centred approach, was used in the main study as its process transfers the responsibility for the management of learning from the teacher to the learners. This is consistent with the PA approach, which places local people at the centre of development initiatives to promote local solutions to local problems. The two approaches are equally focused on learning processes allowing the participants to express their difficulties they had with their learning or their project.

The activities arising out of strategies analysis offer to move the learners towards more self-directed learning: an ultimate goal of the study. This rests on the belief that the more inductive or self-discovery-based the learning activity is, the better it prepares the learners to be more self-directed.

2.3.2.5 Means analysis

Means analysis is complementary to needs and strategy analysis as it takes social and attitudinal characteristics of the learning situation at the local level into account. It helps to deepen understanding of the specific teaching situation leading to the development of a language programme suitable for the local conditions i.e. means to achieve goals or needs. A variety of contextual factors (Munby 1978; Holliday 1984 and 1994; Holliday and Cook 1982 and Kohonen 1992) affecting teaching and learning are:

- The framework of learning goals in which learning will take place: e.g. personal or social demands, such as for professional promotion or improved access to technological and economic advancement.
- The practical conditions where teaching will be conducted: e.g. class size and the range and quality of both teaching and learning facilities available as well as existing level of teacher training and morale.
- The learning culture and traditions of the educational system and the whole community: e.g. culturally-based attitudes and expectations of learners influenced by their previous learning experiences within their cultures.

All of these factors are or need to be taken into consideration in the learner-centred approach as they greatly affect learners' attitudes and expectations as individuals and as members of their social group. Hutchinson and Waters (1987) point out that needs in the learning context are governed not only by the learner himself but by other factors, e.g. society.

Culture is viewed as the most powerful influence on classroom innovation as it causes systemic educational change within different and hierarchically interrelating subsystems, thus: cultural → political → administrative → educational → institutional → classroom innovation (Kennedy 1988:332). All of these subsystems should facilitate or impede each other in the making of a successful language programme. These subsystems also imply a variety of factors influencing learners' attitudes, behaviour and expectations. Organisational factors, materials factors and classroom culture as discussed by Handy (1978, 1988); Yeo (1994); Kennedy (1987); Prabhu (1987); Breen (1986); Cortazzi (1990); Tudor (1996a); O' Neil (1991) and Holliday and Cook (1982) will be also taken in to consideration.

2.3.2.5.1 Organisational factors

Organisational factors concern how the roles and responsibilities of the teachers, the head of the department, administrators and others involved in teaching institutions are distributed. These factors entail the degree of freedom involved in making pedagogical decisions with respect to the definition of learning goals. This directly affects the scope of negotiation of learning content between the teacher and learners and their expected roles and responsibilities. Consequently, this influences the scope of classroom innovation and how change may be initiated and implemented.

2.3.2.5.2 Material factors

Material factors involve class size, the availability of equipment and resources e.g. course material, self-access centres or computer laboratories. This includes resources for teacher training and development, e.g. support for participation in conferences, seminars or study leave.

2.3.2.5.3 Participants

Participants are not only the learners as members of social groups but also other participants who are directly and indirectly involved in the learning process, such as educational authorities, political bodies, future employers, sponsors, teachers of other related subjects, parents and the teacher himself/herself. Their expectations and values affect the choice of pedagogical innovation and the attitudinal climate in which it will be perceived and promoted. More importantly, the teacher's attitudes and expectations, level of professional training, morale, values and professional image need to be taken into account as he or she is a fundamental educational inventor.

2.3.2.5.4 Classroom culture

Classroom culture involves the culturally-based attitudes and expectations with which learners approach their language learning. It is a very complex concept

because it relates to various factors such as the learners' culture both at national and regional levels, their peers' values, their social ideology and their socio-economic condition, which shape their socio-cultural personality in the classroom.

Of all the components of means analysis, classroom culture is the most fundamental. It aims to create 'an environmentally-sensitive teaching approach' in order to avoid any culturally inappropriate teaching innovation (Holliday 1994). The assumptions the learners bring to their language learning derive from their socialisation and prior educational experience, and influence how they perceive and react to a provided pedagogical option. The work of Oxford et al. (1992) indicated that the traditional cultural focus of Japanese and Korean learners is on group solidarity and face-saving, resulting in their reserve or shyness. Conversely, American learners whose traditional culture stresses self-confidence and independence prefer explicitness and being straightforward (Cortazzi 1990). However, there are still other factors involved in the learners' attitudes and behaviour, such as ideological and socio-economic trends, which the teacher needs to understand in order to know how to react to them properly. This is reflected in the major obstacles faced when implementing a communicative approach to English teaching in China (Anderson 1993; Burnaby and Sun 1989). They claimed that the teaching method in China emphasised traditional grammar translation, focusing mainly on reading skills. It was teacher-based and exam-driven, within a very large class. There was limited availability of materials and exposure to native speakers of English. This also holds for Thai learners, whose classroom culture is similar, especially with regard to teaching methods, exam centredness and large class size.

Classroom culture is complex and still relatively unexplored, but the social realities of the classroom can be best discovered through a practical problem solving

approach, including learning from past experiences. The teacher also needs to develop self-critical awareness of the learners' classroom culture over time in order to fully understand how to make the best use of it in making the teaching and learning more responsive to their needs. This again suggests an ongoing process of discovering the culturally based-attitudes and expectations of the learners. The concept of classroom culture also provides an insight into learners' reactions to self-directed learning including their understanding of the roles of teacher and learner (see section 2.3.3.1).

The overall factors affecting the context for language learning and teaching in learner-based needs analysis involve three main factors: the learner herself/ himself, the teacher and the sociocultural context of the learning and teaching situation. These factors cover the learner's motivation, learning styles, the teacher's pedagogy, attitudes and classroom culture, the perceived role of target language and so on.

The ideas underpinning means analysis are reflected through the principles of PA: behaviours and attitudes of facilitators, methods for sharing (see section 2.2.1) and maximising the insights of the causes of rural community problems and the potential of its initiative project.

In conclusion, various forms of needs analyses are drawn upon to show that the learner centred approach could be implemented in an institutionalised system with its pre-determined syllabus and materials, such that the teaching is responsive to the needs of learners through ongoing learner-based needs analysis.

2.3.2.6 Relevant research in needs analysis

This piece of research will investigate PA methods as an instrument of needs analysis that can respond to the fluidity of the learning situation and help the learners achieve a sense of independent learning within a learner centred approach. This has never been done before. However, studies concerning: 1) ongoing needs analysis and 2) in depth pre-course needs analysis are relevant.

2.3.2.6.1 Relevant research concerning ongoing needs analysis

The first case study was conducted by Edwards (2000) and involved addressing the language needs of three German banking officials at the German Central Bank in Frankfurt. It was a specialised banking-business ESP class, involving two lessons of forty-five minutes each per week. The researcher assessed learners' needs in an ongoing analysis due to a lack of full details of the internal language audit from the bank itself. She began the needs analysis by interviewing employers but put greater emphasis on the input from the learners themselves. She used the process of discussion with the learners to set the course aims and objectives and design the course syllabus, materials and teaching methodology in order to enable them to improve their speaking-confidence in business meetings and negotiations in a native-speaker environment. The researcher clearly stated the aim of considering and addressing the learners' 'necessities' and 'lacks', in the course. The course greatly satisfied both the learners and their sponsor as it enabled the learners to achieve their goals effectively and was extended to more than a year after an initial three-month period. Her findings showed the effectiveness of a flexible ESP course design based on practical experiential knowledge of both teacher and learners. Although ongoing learner-based needs analysis is used in Edward's study, the class involved was homogeneous and involved only three students, making it easier to manage in terms of material preparation and meeting the learners' needs. More importantly, the duration of the course was long, allowing more time to address the learners' needs. However, this study did not investigate the development of the learners' self-directedness.

Benesch's (1999) study involved ongoing needs analysis in an EAP context to help the learners cope with a psychology course in a US college. The learners were

empowered to negotiate with the subject teacher for pedagogical change and curriculum adjustment during the course. The findings showed that the learners were more assertive to express their needs so that the subject teachers of psychology course could address their needs better. These findings demonstrated the positive impact of co-operation between the EAP teacher and the learners on the level of learner involvement in their content class. However, Benesch's work did not focus on developing self-directed learning for improving language learning and therefore it is necessary to research more on this in order to help the learners to improve their language ability.

2.3.2.6.2 Relevant research concerning pre-course needs analysis

Bosher and Smalkoski (2002) developed an ESL speaking and listening course for 28 non-native nursing students during the academic year 1997-1998 in the USA, based on objective needs analysis. They combined target situation analysis with present-situation analysis to determine the situational or functional demands of the target situation based primarily on the results of interviews, observations and questionnaires. A variety of methods focusing on role play and materials drawn from sources to develop health care communication skills identified in the needs analysis were employed to engaged the students in the learning process. The findings showed the success of the course in helping the culturally and linguistically diverse students learn how to communicate more effectively in clinical settings. They knew better how to speak to and behaved properly towards their patients. The findings indicated the positive effect of responding to the learners' objective and subjective need to remove the constraints on developing programmes to help the students succeed academically and professionally. Although in-depth objective needs analysis was used in this study, there was no clear demonstration of ongoing needs analysis to accommodate the

changeable needs of the learners as they progressed during the course. The researchers accepted that if findings from the pre-course needs analysis were carefully translated into appropriate course objectives then they needed to be adjusted to suit the students' needs during the course in terms of the materials and methods.

A similar study was undertaken by Shi, Corcos and Storey (2001), who used student performance data based on video and audio transcripts of six 1-hour sessions of a ward teaching to develop an English course for clinical training addressing students' needs at the English Centre at the University of Hong Kong. They found that the learners performed better after the training.

Jasso-Aguilar (1999) utilised qualitative techniques in needs analysis for hotel maids in a Waikiki Hotel in the USA. Participant observation, unstructured interviews and questionnaires were used with the hotel maids and more senior staff. The findings indicated: 1) the value of using multiple sources and methods for identifying learners' needs and 2) the reliability of insiders such as the hotel maids and more senior staff themselves for designing the course in response to the learners' needs in terms of realistic tasks and type of interactions and background knowledge involved. This study also showed the pre-course needs analysis in depth, but this was still the first step in developing the language programme, as the learners need to get involved in the process of course design and their immediate needs should have been responded to as and when they arose.

Another four studies focusing on pre-course needs analysis to enhance course design through ethnographic observation were: 1. Northcott (2001) observed the Master of Business Administration (MBA) classroom in order to investigate the role of interactive lecturing styles within the context of one MBA programme. 2. Holliday (1995) observed staff in an oil company in order to design a language course. 3.

Gimenez (2001) observed cross-cultural business negotiations between non-native speakers of English in an exploratory study. 4. Marriott and Boswood (1994) observed ESP practitioners in an ESP teacher training course.

Others relevant research on in depth pre-course needs analysis has been carried out by Chia et al (1999), Lambert (2001), Sullivan and Girginer (2002), Boyle (1994), Stapp (1998), Mead and So-mui (2000), Flowerdew (1995), Ward and Crosling (2002), Jafre Bin Zainol (1992), Coleman (1989), Seferoglu (1998), Detaramani and Chan (1999),

These studies mainly focused on pre-course, expert driven needs analysis rather than ongoing learner based needs analysis and did not emphasise empowering learners to be self-directed. This is because it is the ultimate goal of all kinds of education. Especially this target course is an ESP course within a foreign language situation where the learners take it as an intensive course without sufficient exposure to native speakers or enough opportunities to use the language in a daily life. It is essential for the learners to be trained to be self-directed in order to improve their language ability on their own after the course. The alternative way to do this is to address their needs with their own appraisal in order to enhance their attitudes to and motivation for learning the language and to become self-directed. That is why PA methods were chosen as a means to achieve this purpose.

2.4 Participatory Appraisal

Participatory Appraisal (PA) is adapted from Participatory Rapid Appraisal (PRA) by the rural developers in non-governmental organizations in many parts of the worlds such as South America and Central Asia. It is an approach to needs analysis

that enables local people i.e. farmers to analyse and identify their own needs and make their own decisions based on their own knowledge of local life and conditions.

The followings are the reasons why the researcher decided to look at Participatory Appraisal (PA) methods as an instrument of needs analysis that would respond to the flexibility of the learning situation in order to move ESP learners toward self-directed learning to develop academic reading skills within a learner-centred approach.

- a.) they focus on participants' use of their own knowledge to help them understand and reach solutions for their own predicaments
- b.) they are iterative and therefore track learning as an unfolding process over time
- c.) they can be built into the learning situation.

As Participatory Appraisal (PA) methods were employed as the instrument for learners- based needs analysis to enhance learner centredness in this research study, the related literature of PA will be discussed. They involve its: 1) evolution, 2) principles, 3) process, 4) methods, 5) application to individual practitioners and 6) application to literacy.

2.4.1 PA Evolution

PA originated from an increasing dissatisfaction with the traditional rural development processes such as Rapid Rural Appraisal (RRA) during the late 1980's. RRA is 'an emerging methodology for rural development-related research.' (Carruthers and Chambers 1981; Chambers 1980, cited in Lovelace 1988: 3). It focuses on collecting accurate information from local people such as farmers and foresters through a variety of methods in order to allow experts such as government officers and members of parliament (MP) to prepare a plan that effectively addresses

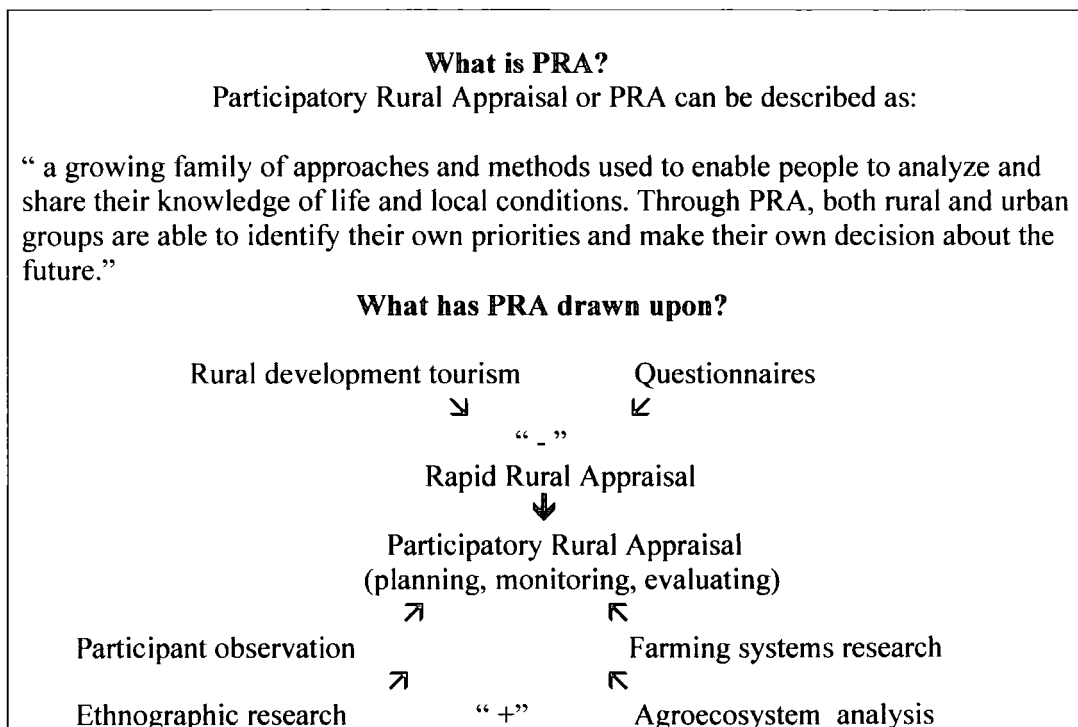
the needs of the local people, using rapid and less costly methods with better quality and more reliable information. However, the disadvantage of RRA was that the needs of the local people were analysed by outsiders e.g. MP, government officers and experts in rural developers away from the field who thus might not be most able to identify the relevant needs, which then might not lead to action and planning suitable at a local level. This was because its means of generating information was still predominantly based on the assumption that the local people are not experts.

During the late 1980's, the need to modify RRA led to the origination of Participatory Rural Appraisal (PRA). As PRA has rapidly evolved in different contexts, organizations, countries and regions especially in the third world or in less advantaged places such as some countries in Africa, Central and South East Asia and South America, Chambers (1997a: 104) defines PRA as 'a family of approaches and methods to enable rural people to share, enhance, analyse their knowledge of life and conditions, to plan, to act, to monitor and evaluate'. PRA places greater emphasis on the process of sharing and developing ideas within a community, enabling local people, facilitated by outsiders, to conduct their own analysis meaningfully. With this objective, PRA is used as a research tool to gather information, which leads to local analysis, planning, action and ultimately participatory monitoring and evaluation.

Participatory Rural Appraisal has been successfully used with local communities as a form of needs analysis to discuss local people's real needs and to promote local actions in rural development since the late 1980's. It has spread throughout hundreds of countries worldwide both in urban and rural areas from East and West Europe to Africa, Asia, Australia and North and South America. In particular, it has been used for rural development in the northern region of Thailand (Gypmantasiri, Wiboonpongse, Perkasem, Craig, Rerkasem, Ganjanapan, Titayawan,

Seetisarn, Thani, Jaisaard, Ongpaserat, Radanachaless and Conway 1980) and the north eastern region of Thailand since the early 1980's starting with RRA (Khon Kaen University 1987; Grandstaff, Grandsstaff, and Lovelace 1987; Samart 1987; Lovelace, Subhadhira and Simaraks 1988) PRA has been applied to diverse situations such as agriculture, adult literacy and institutional assessment also worldwide since its inception but not to an ESP class. However, it critically involves the participation. Moreover, it can be equated to needs analysis which was discussed earlier as it addresses the needs of the people to enable them to solve their own problems. This principle suited the needs of this research project to help the learners realise their real needs and become responsible for their own learning in order to develop their language learning. The principles, process, methods of PRA will be discussed. The overall concept of PRA is illustrated in Figure 3.

Figure 3. Concept of PRA



Source: (Jones 1996: 11)

The diagram shows that the strengths of other participatory processes have been absorbed into PRA, such as applied social research and participant observation, farming systems research for recognizing diversity and risk, agroecosystem analysis through making use of diagramming, and participatory action research focusing on the importance of people's own analysis. Thus, PRA can touch upon the realities of the local people in a way that is born out of their own perceptions. These realities lead to local analysis and potential local planning and determine action. This concept could be summarised as the local people's realities, knowledge, criteria and values, priorities, analysis, actions, monitoring and evaluation having been taken into consideration.

The principles of PRA involve a reversal of traditional ways of working with local people in rural development 'from dominance to facilitation, from closed approach to open approach and from tedium to fun' (Jones 1996:13). These principles aim to help local people to gain more confidence in their own ability to analyze their own situation and to make decisions upon which to act.

2.4.2 Principles of PRA

As PRA is continually evolving, most of its principles have been extracted by trial and error and what has been found to work successfully. The main principles of PRA involve three foundations (Mascrenhas, Shah, Joseph, Jayakaran, Devaram, Ramacharnran, Fernadez, Chambers and Pretty 1991, cited in Chambers 1997a: 104-105): 1.) behaviour and attitudes, 2.) methods, and 3.) sharing.

These principles (see section 2.2.3 for more detail) are based on the most fundamental shift, which is the community's realisation of its own depth of knowledge and understanding of their own environment. Instead of recognising an outsider expert as one who knows all as in RRA, the thinking shifts to recognizing the local people as

the ones who know more about their own local realities. Thus, the assumption about local action is shifted from action 'for' local people to action 'with' and 'by' local people. 'This includes moving from methods of gathering more accurate information (for effective consultation) to approaches for joint analysis and planning (for ensuring meaningful participation) (Jones 1996: 9). Chambers summed up the primary principles of PRA as:

- 1.) Hand over the stick: focusing on facilitating the transfer of some learning or work related responsibility to the local.
- 2.) Self-critical awareness: focusing on self-development of the facilitators.
- 3.) Personal responsibility: focusing on self-directed learning and not relying on authority.
- 4.) Sharing: focusing on sharing information and ideas with a wider range of people not only the local people.

Others principles derived from RRA are:

1. A reversal of learning: learning directly from local people on site.
2. Learning rapidly and progressively: using conscious explorative learning approaches and being flexible and adaptable in the learning process.
3. Optimising trade-offs: relating the costs of learning to the concepts of usefulness including time management.
4. Triangulating: using more methods for cross checking.
5. Complexity and diversity: seeking and enabling the expression and analysis of complex and diverse information and judgements.

(Chamber 1997a: 156-158, adapted)

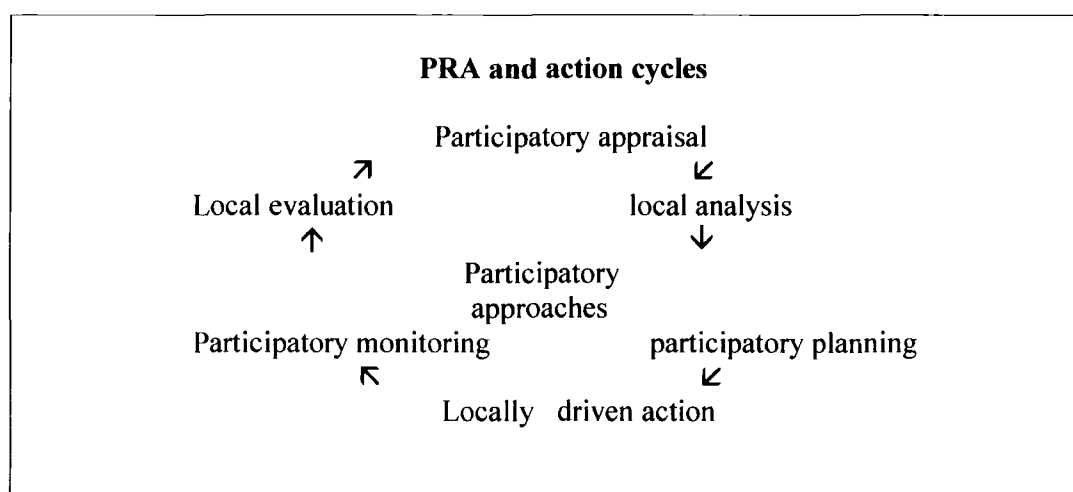
With respect to the deduced principles, PRA involves the reversal of traditional ways of working with local people in rural development and the changes in its methods of working such as from ‘individual interviews to group discussions, from measure absolutes to comparing/ relatives and from creating averages to seeking diversity’ (Jones 1996:13).

Similarly, these principles are relevant to the role of the teacher in the learner centred approach. The teacher needs to take into account individual differences, learning styles and learners’ culture (as discussed above) in order to adjust the teaching and learning to be more responsive to the needs of the learners and to achieve the educational goal.

2.4.3 Process of PRA

The process of PRA leads to an analysis of information, which simultaneously encourages local people to actively participate in an ongoing process. This is because there has been a shift from top-down or one- way communication to dynamic or two-way communication in which the ideas from one stage feed directly into the next. This process is illustrated in Figure 4.

Figure 4. Process of PRA

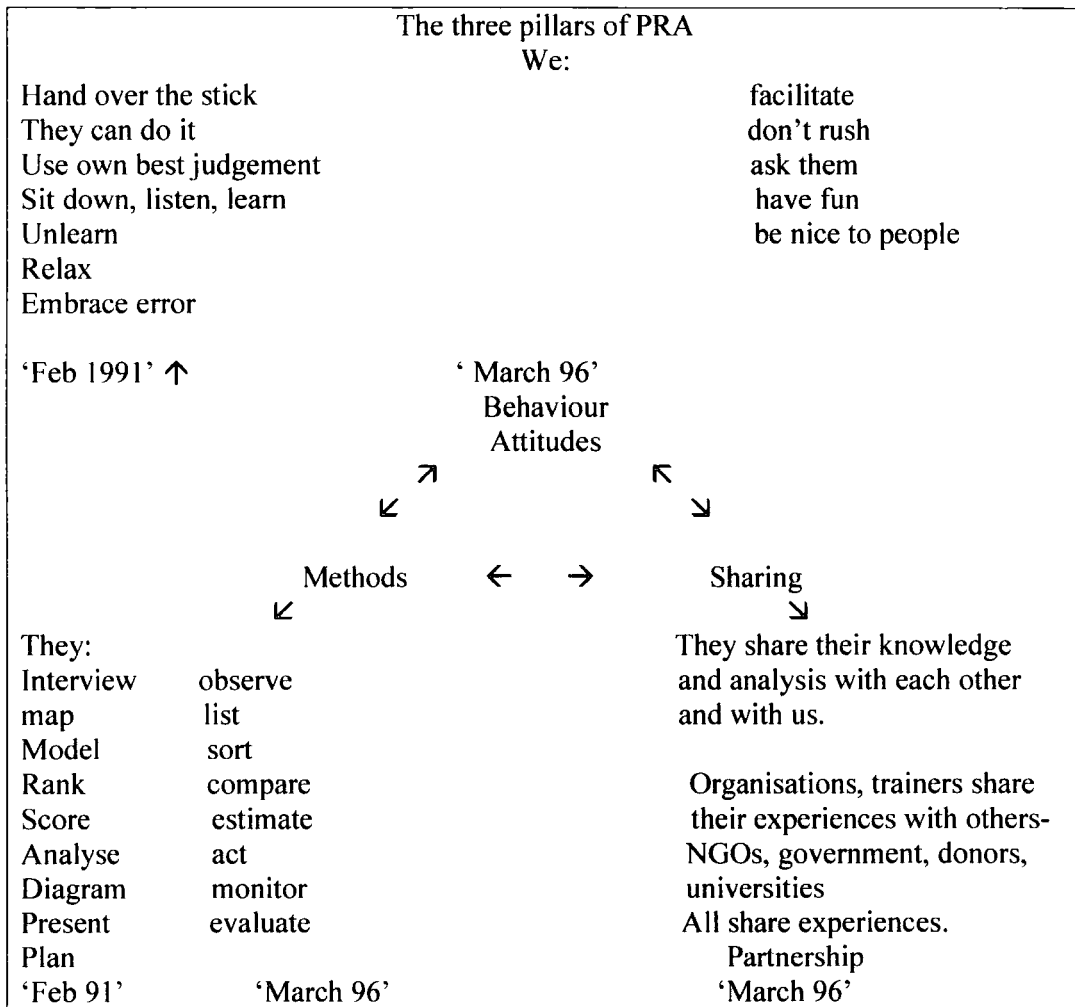


Sources: (Jones 1996:14)

2.4.4 Methods of PRA

PRA is a flexible process without any blueprint or any set order of activities to be followed. Its methods have been drawn from successful practical experiences in a variety of diverse areas. Its methods are innovations which continually increase due to its range of different visual tools, which can be used or adapted to enable group analysis and communication within a wide range of situations. In order to understand its methods, it is necessary to understand its foundations (as previously touched upon) in detail. The three foundations and the evolution of PRA methods over time are illustrated in Figure 5.

Figure 5. Three pillars of PRA



Source: (Chambers 1997a: 105)

The three pillars of PRA imply that whichever PRA method is used, its ultimate goal is to empower people. Chambers (1997a: 106) states that ‘for many, PRA seeks to empower lowers- women, minorities, the poor, the weak and the vulnerable- and to make power reversals real.’ He concludes with regard to PRA fundamental methods that ‘value is placed on decentralization, open communications and sharing knowledge, empowerment, diversity and rapid adaptation.’ (ibid: 197) Each of the three main pillars or foundations of PRA will be discussed in turn.

2.4.4.1 Behaviour and attitudes

The first pillar of PRA foundations is the physical behaviour and mental attitudes of the facilitators. These are considered to be the key aspects of PRA. Their focus is on the practical way the facilitators interact with local people at both professional and institutional level. For instance, the desirable behaviour and attitudes enable participants to take action themselves by reducing physical and mental barriers within a comfortable and relaxed setting in order to encourage participation and involvement with enjoyment and interest, and to show respect by, for example, appropriate clothing. Further, the facilitators’ behaviour and attitudes also involve fostering self-critical awareness and embracing error as well as attentively listening and observing. More importantly, the facilitator needs to be aware of the dynamic interaction between him/herself and the local people as a continuing contextual analysis. This idea of ‘on the spot and contextual analyses means that all the ideas that are being put forward are discussed and analysed during the field work, not afterwards by the facilitators alone. This means that any contradictions or problems can be discussed immediately and that there is potential for local people to be involved, preferably as the primary analysts.’ (Jones 1996: 20). It clearly ensures that the real needs of the local people are met. This pillar also includes how to deal with participants who

disrupt or dominate the PRA process such as how to involve or ignore them. This concept of personal change is applied to the research project in terms of the role of the teacher as a facilitator or learning counsellor.

2.4.4.2 Sharing

The second pillar or foundation focuses on partnership or sharing. In order to cause personal behaviour and attitudes to change, organisational change is needed both at professional and institutional levels. Personal, professional and institutional changes are interrelated and reinforce each other.

This concept is applied to the research project through learner empowerment so that the teacher and the learners were able to share necessary information with each other by means of two- way communication focusing on identifying and addressing the learners' own needs. It was done through an ongoing needs analysis/course evaluation by means of negotiation and consultation. The learners and the teacher also supported each other through their changing roles; i.e. the teacher became less domineering while the learners became more independent as the course progressed. This process of sharing continued throughout the course. The concept of sharing was applied to the collaboration between the teachers and her colleagues who taught the same course and among the learners themselves as they are always actively involved in group work.

2.4.4.3 Methods

The third pillar of PRA is methods. Local people are encouraged to get involved at all levels of their local projects from planning to monitoring and evaluating through the cooperation between them and the facilitators. A wide range of PRA methods can be selected to serve particular purposes and people's needs, used as an on-going programme with an iterative process in which each stage builds on the previous one.

Using different methods of PRA not only helps the facilitators maximise the contact between them and the participants but also enables the verification of ideas gained from collected information. In other words, it is a process of triangulation or cross-checking of information.

Similarly, this research project has chosen seven PRA methods for both the learners and the teacher to apply in order to gain greater understanding of the learning and target situation. The selected methods are:

- 1.) Daily Schedule,
- 2.) Brainstorming through semi-structured discussion,
- 3.) Cause and Effect Diagrams,
- 4.) Well-being Ranking,
- 5.) Mapping,
- 6.) Matrix Scoring of Priorities,
- 7.) Transect Walk

Each of these seven PRA methods will now be discussed but discussion of their implementation is in Chapters four and five.

2.4.4.3.1 Daily Schedule

The method of making daily schedule diagrams is used to identify local people's daily labour patterns, their other activities, their work type and distribution of workloads throughout the day. The outcome of this method enables the planning of activities to suit schedules and needs as appropriately as possible. Jones (1996:42) stated that 'knowing local time schedules can help when arranging meetings, to ensure they are at a time convenient to different groups. They are also useful if new activities are being proposed, to discuss who has time and resources to carry out planned initiatives.' This method was adjusted in the research study to determine how

the learners spent time in their main daily activities so that the teacher could design tasks to suit their time and needs.

2.4.4.3.2 Brainstorming through semi-structured discussion

This PRA method was most frequently used and most easily integrated in the other methods both before and after the delivery of the main course. During the course, the method was mainly used to aid discussion and negotiation as part of an ongoing learner based needs analysis/ course evaluation. This research study used two main aspects of this method. Firstly, it was employed for decision-making and negotiation dealing with five major aspects: 1.) course objectives, 2.) grouping, 3.) assessment, 4.) time arrangement, 5.) reading for pleasure, 6.) solving problems that occurred at any stage of the study. Secondly, it was used to respond to the feedback from ongoing learner-based needs analysis which simultaneously served as an on-going course evaluation. The teacher used the method to allow the learners to discuss their needs and how they would be suitably addressed.

To create an effective semi-structured discussion it is essential that facilitators integrate within their methodology good techniques as well as behaviour and attitudes. ‘It is important that careful probing takes place to ensure that the real ‘heart’ of the issue is reached.’ (Jones 1996: 30) Probing needs to be supported by careful observation and judgement as to whether statements are factual or mere opinions.

As the way in which a question is phrased determines the response, the question should be carefully chosen. The facilitator should establish good rapport with the participants and be flexible but with clear objectives. The questions should not be fixed but open, clear and relevant to create a relaxed atmosphere and flexibility to pursue the important issues for the participants. This method was adapted in the research project to ascertain the unfolding needs of the learners throughout the course.

2.4.4.3.3 Cause and Effect Diagram

This method was originally used to discuss the real needs of local people in order to promote their own local actions. Problems were identified and defined by the local people themselves. This method helps them to define their main problems and establish the relationships of cause and effect in respect of their problems, such as poverty and natural or environmental disaster in their area. The outcome of their discussions can be presented in the form of a diagram or a flow chart. This helps both the local people and the facilitator to see the causes and effects of the identified problem more clearly, which leads to its solution based on collaboration.

In this research study, this method introduced in the first week of the course was adapted to help the learners explore their problems in language learning in relation to their own perceptions including their proposed solutions. They were asked to identify the causes of their difficulties in learning the language and what effect this had on their attitudes, motivation and progress. Then each group presented this in the form of a table under four main language skills within these four categories: problems, causes, effects and proposed solutions.

2.4.4.3.4 Well- Being Ranking

This method was originally intended to identify the different welfare groups of the local people from the most poor to the rich, based for instance on the ownership of cattle and sheep. The criteria are identified by the participants as the process developed. The different types of welfare group are discovered according to the local people's own criteria so that it is easier for the facilitator to know which groups need more help and how to support them to be able to help themselves best.

Similarly, in the language class, the hierarchy was determined by language level. The learners in this research study were asked to discuss in groups the criteria

for judging what a good learner was. Then they presented their results to the class. The learners' perception of their language ability was reflected through their own identified criteria. This method was intended to help the learner identify different types of language learners in order to raise their awareness of how to improve their own learning to become better language learners according to their defined criteria.

2.4.4.3.5. Mapping

This method was originally used to explore the resources local people used and how they actually used them. The local people were encouraged to draw a map of their farms and state activities occurring on them. Using the map and the linkage diagram helped discover the needs and problems of local people. The method of participatory mapping is widely used in PRA as it is easy to understand and can be adapted to suit many purposes. There are two main types of maps. The first type of map is defined as a social map, which indicates housing, infrastructure and services. For example, a map of a village with houses and the numbers of family members can indicate many aspects of village life such as well-being or health. The other type of map is a resource map, which illustrates natural resources, crops, rivers and other natural features. These two types of maps can overlap. Other types of maps can be created according to specific purposes as in this study, which adapted this method to create a resource map for identifying local sources of information to which the learners had access.

This method was adapted to help the learners to access local resources to facilitate their self-directed learning. For example, the teacher used this method to solve learner problems in finding relevant reading materials for reading for pleasure.



2.4.4.3.6. Matrix Scoring of Priorities

The method of matrices is employed in PRA to specify the priorities of the local people as they perceive them. The matrices were designed to show the relative importance of each item by using either scores or ranking. The participants chose the items that were listed along the top of the matrix, with their identified criteria down the side in order to compare each item in the original situation.

For example, potential demand for new projects and preferences for a variety of crops or existing natural resources can be examined by this matrix scoring method. This method can also be adapted to compare the way in which different elements such as crop production have changed over time. This leads to the revealing of problems or needs. In rural development, rural people are encouraged to prioritise their needs.

This method was adapted in this study to help the learners identify their priorities related to their language learning, focusing on reading improvement. The learners were asked to identify which methods, strategies and materials they preferred.

Randal Holme and Julie King of the University of Durham Language Centre used matrices with teacher development groups in Montenegro in order to help them identify the obstacles to implementing change in teaching methodology. Since many problems in the country at that time were social, with a refugee population swollen by war, the matrices developed into a discussion about the impediments of resource problems and difficulties with student apathy. However, it was also clear that once identified, these problems did not form real impediments to changes in teaching styles. In fact they might even have furnished further reason to implement change. Larger obstructions came from the human factors of general resistance to change (Holme, personal communication 2003)

2.4.4.3.7. Transect Walks

This PRA method is used to back up the mapping method. Rural developers or facilitators used this method when interviewing local people within their own farms or houses about their needs and problems, such as the strong resentment against the taxation of crops or the existence of land unsuitable for tractor cultivation. They allowed the local people to guide them in a transect walk selected from their maps. In this way, the facilitators have direct experiences of the realities of the lives of the local people. This method helps them better understand the issues raised and discussed through other related methods. It also maximises the facilitators chances of meeting other local people and gaining additional information, through observing and discussing with the local people during the transect walks.

The teacher/ researcher's interest in this method arose from the sense that there was a "hidden agenda" behind the students' problematic reception of a semi-technical text unsuccessfully introduced in the third week of the course. The learners expressed their negative feeling for this type of text and did not want to study it as they found it boring and very difficult to read.

To counteract this problem, the teacher found other learners who were already in the class's target situation. The teacher asked each group to interview their seniors in the third, fourth and fifth years as well as some pharmacists who were former students working in the university hospital. This was intended to raise awareness of their target situation needs and their learning needs, focusing on both academic and professional purposes. They were provided with semi-structured interview questions to ask the interviewee about what they needed to read in English for their study or their work and what their problems were. The interviewers were also required to ask the interviewees about preparation for studies in higher years or at work. This method

helped the learners in this study to find out their real target situation needs themselves through an opportunity to get direct experience of the realities of the actual situation.

All of these selected PRA methods were adapted in the research study not only to raise the learners' awareness of their own target situation and learning needs but also to address their needs in order to help them move forward to greater independence so that they could develop their own learning (see Sections 4.2 and 5.2).

2.4.5 Application of PRA methods to an individual practitioner

The three important stages in supporting PRA practitioners are training, follow-up and reinforcement. For example, PRA training was organized for non-governmental organization (NGO) staff in Central Asia in order to use the developed participatory processes to involve local people who had never been allowed to do this before in planning processes. It was found to be necessary to follow-up, reinforce and support the participants in transferring what they have learnt into practice and thus to start involving the local people in planning initiatives. Some suggestions (Jones 1996; Chambers 1997; Kumar 1997; Pretty, Guilt, Thompson and Scoones 1995; and Archer and Cottingham 1996) for individual practice and self development were as follows:

1. Develop own action plans for following up what has been learnt during the training.
2. Gain further practical experiences and establish good rapport with local people.
3. Share ideas about practical work with others as an iterative learning process through on-going practical experiences.

4. Continue to assess own behaviour and attitudes and be open to self-criticism for self-improvement in using PRA methods and embracing error.

Further, similar suggestions were offered at all levels of the organization from individuals to national and regional NGO communities. It was declared that within each NGO, there should be support for individuals, sharing of ideas, programme re-orientation and institutional orientation. Also the national and regional NGO communities should have national plans including support organizations, resource centres, sharing of experiences, policy implications as well as regional and international networking. Follow up support is essential at all levels.

This concept can be applied to a classroom situation. Teachers need to undertake action research for professional development and to gain practical experience, and this research can be carried out as a collaborative project with colleagues. This process should be on going for both self-development and professional development (Wallace 1998). There should also be a network to support teachers at all levels from the institutional up to national and international levels.

2.4.6 Application of PRA methods in Literacy

The idea of practical innovations using PRA in literacy is practised through Regenerated Freirean Literacy through Empowering Community Techniques (REFLECT) (Archer and Cottingham 1996). REFLECT is an approach to adult literacy, which fuses the theory of Paulo Freire (1974a,b), a renowned Brazilian educator, and the practice of PRA. Paulo Freire 'links literacy to social change through the process of conscientization (i.e. adults would learn to perceive social, political and economic contradictions and would take action against the oppressive

element of reality). Freire saw dialogue as fundamental – the need to learn to read the world at the same time as learning to read the word’ (Archer 1994: 59).

The REFLECT approach, like other forms of PRA, is still evolving, with increasing innovations and adaptations. Each REFLECT process consists of a literacy circle that develops its own learning materials through the construction of graphics e.g. maps of the household or matrices to analyse local crops and calendars of gender workloads. At the beginning of the programme or literacy circle, there is only a manual for the literacy facilitators. There are no textbooks or pre-printed materials as literacy primers. The purpose of using graphics with the other types of PA approach e.g. role play and games, is to activate discussion, participant-generated writing related numeracy work, and action to address local problems. The detailed analysis of the local communities presented in terms of approximately 20-30 maps or calendars is the outcome of each literacy circle at the end of the process. These permanent records of analysis are useful for planning local development initiatives. Each participant constructs their own materials in the form of a small book copied from their own graphics, phrases and sentences which reinforces the participants’ sense of achievement and ownership.

In the second language classroom context, Benson (2001:29) points out that the goal of Freire’s methods is ‘critical social participation within the process of education itself’, rather than enabling the individual to become an autonomous member of society. However, its pedagogy has been developed in the context of adult self-directed second language learning (Kenny 1993; Pennycook 1997 and Ramadevi 1992) as it involves the learners in dialogue and reflection on a problem, which was presented in order to activate their analysis of their own social realities in order to reform them.

Chambers (1997a: 231) who is one of the prominent experts in PRA suggested five strategies and tactics for change in PRA methods to enable participants to take action on their own. They are applicable to the implementation of PRA methods in a teaching and learning context focusing on promoting learner empowerment.

1. The first involves the shift from 'didactic teaching to participatory learning'. Interactive learning among the learners and teacher is optimised by helping one another to learn more effectively.
2. The second involves the shift from 'classroom and things to field and people.' Learning should be more experiential through direct contact with field realities or through self-discovering processes.
3. The third suggests that one 'learn through empowering learners.' Learning is done through empowering learners so that there is communication between the teacher and the learners and among the learners themselves.
4. The fourth 'stresses the personal and interpersonal.' Personal awareness and reflection on behaviour and attitude changes is promoted in the training or learning process.
5. The last focuses on 'value diversity, creativity and dissent.' Individual differences are taken into account through constructive criticism to encourage discovery and invention.

In summary, the learner-centred approach and PRA share common grounds in terms of promoting learner empowerment to enable them to become independent. They attempt to train and involve participants/learners with a wider range of methodological options through an explorative approach as an ongoing learning process. They both have roots in a reaction to the teaching revolution. That is, they

oppose the pedagogical solutions to learner development in which self-directedness is external, imposed and pre-packaged.

2.5 Reading in ESP

The difference between reading in ESP and reading in general seems to be a continuum rather than an absolute. This is because when learners read in general or in ESP courses, they read for a purpose such as to obtain information and to discover author's viewpoints. Jordan (1997:143) states that: 'in the process of readings, students will be concerned with the subject-content of what they read and the language in which it is expressed. Both aspects involve comprehension, though of different kinds. Depending on the reading purposes, different reading strategies and skills will be involved; in turn, the skills can be divided into sub-skills'. Nuttall (1996), Grellet (1981) and Munby (1978) have described reading strategies and skills which play crucial parts in comprehension. These reading strategies and skills can be summed up in the terms of 'top-down and bottom-up processing' (Nuttall: *ibid*). She claimed that readers' intelligence and experience based on their acquired schemata are used to comprehend the text in top-down processing but they consider grapheme/morpheme or a word and sentence structure to understand the text in bottom-up processing. The readers use both processing to complement each other in order to comprehend their texts. Her four main categories for reading skills and strategies are:

1. 'Strategies involving flexibility of technique: variations in reading rate, skimming, scanning, study reading and so on,
2. Strategies of utilizing information that is not part of the linear text: reference apparatus, graphic conventions, figures (diagrams, etc.),
3. Word attack skills: tackling unfamiliar lexical items by using morphology, inference from context, a dictionary, etc. and,
4. Text attacking skills: interpreting the text as a whole, using all the clues available for both top-down and bottom-up strategies, including cohesion and rhetorical structure.' (*Ibid*: 172)

However, reading in an ESP or EAP course has some significant features to be considered as follows:

A. Topic

Specific topic is presented as one of three different types of ESP by Carver (1983) among English as a restricted language e.g. the language used by air traffic controllers and English for Academic and Occupational Purposes e.g. English for Medical Studies and English for medical doctors.

Because an ESP course is generally intensive or time-limited with adult learners who have specific needs and clear objectives in learning, the topic chosen should derive from their area of study or be in some way relevant to it. This means that a skills focus, as in reading, can also acquire content relevance, as in Medicine, or in the case under study, pharmacology. As Peretz (1988:182) summarising Graham and Beardsley (1986) stated:

‘Among the fundamental principles of ESP are emphasis on context, the importance of attending to meaning and not to language form, and consideration of the needs of the learner. In order to meet the objective of preparing learners to function in a very specific environment, ESP courses are primarily structured to promote efficient and effective acquisition of particular language and communication skills.’

Thus, generally the topic is based on the learner’s requirement for genuine communication in their target situation, taking account of their needs. In other words, ESP, may have skills orientation but can still be content-focused or content based (Master 1997:26) where a class have a common target situation as their objective. Further, this specificity of topic also has a role in compensating for linguistic difficulties in reading a text (Anderson and Urquhart 1983 and 1985; Ulijn 1984; Mohammed and Swales 1984; Koh 1985) because it keeps the students on a familiar

ground allowing them to predict content, even when their vocabulary or grammar fails them.

B. Text

ESP favours an authentic type of text. Robinson (1991: 54) refers to 'the use of print, audio, video and pictorial material as being originally produced for a purpose other than the teaching of language'. In referring to ESP she means 'material normally used in the students' own specialist workplace or study situation' (ibid). Because the selection of ESP texts is based on needs analysis, and needs are specific to a given learning situation, many ESP practitioners prefer in-house or locally produced materials rather than commercial texts. (Baumgardner, Chamberlain, Dharmpriya, and Staley 1896; Pilbeam 1987). However, not all the ESP teachers are in the position to do comprehensive needs analysis and material production. Thus, the idea of a resource bank of pooled materials (Jones 1990) is practical for them in reality.

C. Methodology

Methodology for teaching reading in ESP should be based on need of the learner to acquire the skills to obtain information in their discipline. Thus, ESP texts should be viewed as 'vehicles for information', not 'linguistic objects' (Johns and Davies 1983). That means the methodology in reading ESP texts is mainly focused on the text information rather the linguistic forms. Also, a reading methodology based upon intelligent and challenging comprehension questions is needed in order to enhance the creative thinking of the learners not just to manipulate the language (Adams Smith 1981; Alderson and Lukmani 1989). In some ESP courses, especially for professional purposes, the learners 'should be in a perpetual state of re-education, so that they can understand that professional reading does not end upon qualification' (Ciecierska, Holme and Walsh 1997). In order to do this, the learners need to be

equipped with self-directed learning strategies. Dudley-Evans (1997) and Carver (1983) advocate self-directed study and research tasks to ESP methodology which aim to enable ESP language learners become language users to serve their specific needs both in terms of academic and professional purposes.

It can be concluded that the characteristics of ESP courses include three main features i.e. purpose-related orientation, authentic (modified and unmodified) materials and self-direction (Carver, *ibid*).

2.6 Relevant research

As the research project aimed to enhance learner centredness by the use of PA methods to help develop learner independence to enable them to improve their reading skills, some relevant research studies on developing learner independence and on ESP reading courses will be discussed.

2.6.1 Relevant research concerning developing learner independence

A qualitative case study was carried out by Darasawang (2000). It investigated the effectiveness of a learner training programme integrated into a compulsory English course at university level in Thailand. The course was a general English for Science and Technology programme for first year engineering and science students in the first semester (four months), using the course book 'Interface' (Hutchinson and Waters, 1984).

The research aimed to develop positive attitudes towards autonomous learning by providing an environment encouraging learner autonomy expressed through the opportunity for decision- making, focusing on learning in self-access centres and hands-on experience in independent learning. The findings demonstrated the

effectiveness of the training programme in terms of the improvement of the learners' attitudes to and motivation for independent learning, and their confidence to learn by themselves. The learners' movement towards autonomy was indicated by their willingness to adopt a deep approach to learning and especially in planning their overall language study. This research neither stressed learner centredness nor focused on addressing learners' needs through the learning process as this research project does. It did however include some elements of the learner centred approach in its training, such as sharing decision making and transferring responsibility from the teacher to the learners while working on a project in a self-access language centre. However, it neither investigated the learners' language improvement as the effect of learner autonomy training, nor employed ethnographic participant observation as in this research project.

Another relevant study was an ethnographic case study research carried out by Simmons (1996). It asked whether four learners had increased their awareness of their use of learning strategies and if they applied any new and more effective strategies acquired during the course: the Independent Learning programme at the National Centre for English Language Teaching and Research at Macquarie University, Australia. This study focused on one- to- one learning strategy training, not on ongoing needs analysis and involving learners in the learning process in class. The findings indicated the success of the study as the learners were more aware of which strategies suited them and used them to better manage their language learning programme by the end of the course.

The third case study was conducted by Nunan (1990) as an approach to curriculum development evolving out of a learner-centred philosophy of second and foreign language teaching. The focus of this study was not on the process of training

the learners but on that of developing a curriculum. He depicted various stages in the curriculum process, incorporating information by and from learners at each stage, from pre-course needs analysis and grouping of learners to assessment and evaluation. The development of localized curriculum initiatives was more responsive to learner needs than a more centralised approach. However, the former put greater demands on the teachers than the latter. Also, some teachers felt their authority was undermined by the collaborative involvement of the learners in planning, implementing and evaluating

Other relevant research studies were undertaken by Stephenson (1990), Lee (1998) and Todd, Mills, Parad, and Kamcharen (2001).

2.6.2 Relevant research on ESP reading

It needs to be clearly stated that this research project does not focus on reading methods but on implementing PA methods as an instrument for ongoing learner based- needs analysis to enhance learner centredness in order to move them towards more self-directed learning to improve their reading skills. However, as TEP 411 236 is an ESP course (to be more specific as an EAP reading course), some relevant current research relating to ESP e.g. EAP, EST (English for Sciences and Technology) reading courses needs to be considered.

2.6.2.1 Designing ESP/EAP reading courses

The first selected relevant study of a qualitative research was conducted by Yun-Zhu (1999), who designed a new English for Specific Purposes course in China to improve learners reading skills. The materials and methodology were based on pre-course analysis using questionnaires and discussion. The findings showed the positive effect of responsive teaching on increased learner involvement in the learning process,

with learners becoming more conscious of their role as central players in the ESP class more confident in their own reading skills. However, this study did not aim to train the learner to become more self-directed. Others relevant research studies concerning ESP/EAP course design focusing reading skills were undertaken by Sifakis (2003), Spector-Cohen et al. (2001), Yogman and Kaylani (1996), Lepetit (1993), Hyland and Hyland (1992), Jones (1991) and Arnold (1991).

2.6.2.2 Problems in reading ESP texts in English

One of qualitative studies concerning problems of Thai undergraduate students in reading EST texts was conducted by Ward (2001). The findings from the results of learners' questionnaire and interviews showed that the learners failed to adequately address the textual materials in the textbooks but concentrated on the applications e.g. examples provided as coping strategies to compensate for difficulties in reading textbooks in English. The study indicated that one ultimate goal of the curriculum -to develop national self-reliance in technology- is unlikely to be achieved. It also stated that appropriate and practical reading courses to improve reading skills and self-directed learning were called for. Other relevant research studies concerning problems in reading ESP texts were carried out by Barron (2002), Yakhontova (2001), Barron (1991), Kuo (1993), Marshall and Gilmour (1993), Jones (1990) and Amer (1994).

2.6.2.3 Reading methods and strategies in ESP courses

Another study using action research was undertaken by Tarhririan and Biria (1994) who compared three methods of teaching ESP reading: translation, a reading method focusing on comprehension of written texts guided by the teacher's questions and a rhetorical/communicative method focusing on task-based activities to increase more learner involvement in the learning process. Nevertheless, the study did not

focus on ongoing learner based-needs analysis and learner independence. The findings revealed that those learners taught by the rhetorical method showed better reading proficiency, indicating its positive effect on the teaching of ESP reading compared to the other two methods which were not compatible with current ESP theories. Other relevant research studies in relation to reading methods and strategies focusing on an ESP course were carried out by Nesselhauf (2003), Christina and Martinez (2002), Hyon (2001), Tomlinson (2000), Hayachi (1999), Currie (1999), Wilhelm and Hu (1998), Janzen and Stoller (1998), Kasper (1997), Nunan (1997), Li and Munby (1996), Kasper (1995), Mustafa (1995), Okoye (1994), Bilton and Jackson (1994), Flowerdew (1993), Benson (1991), Cotterall (1990), Bensoussan (1990) and Adamson (1990).

2.6.2.4 Teacher training for ESP practitioners

Chen (2000) conducted a case study applying action research techniques to show how a general English teacher could apply professional self-training to develop his ESP expertise through self-reflection on his performance of authentic teaching tasks in an ESP class. The findings indicated his increased confidence developing his self-directed training to become a more well-qualified ESP teacher. Other relevant research studies concerning teacher training for ESP practitioners were undertaken by Sullivan and Girginer (2002); Barron (2002); Jackson (1998); Ghawi and Hess (1997); Kirschner, Spector-Cohen and Wexler (1996); Marriot and Boswood (1994) and Platt (1993). These studies showed how teachers could develop their expertise in order to cater for learners' needs in their special fields of study.

None of the relevant research studies mentioned above investigated all three main aspects in the same study in the way that this research project does: 1) implementing PA methods as an innovative instrument for ongoing learner-based needs analysis, 2)

enhancing learner centredness by PA methods and 3) empowering learners through PA methods and learner centredness to develop their self-directedness to improve their own reading skills. All three were taken into consideration in designing TEP 411 236 in terms of methodological, material application and course organisation when appropriate.

In conclusion, it is clear how in ESP, learner- centredness, learner-based needs analysis, and PA methods share a similar purpose: the promotion of empowerment for the improvement of independence. PA originally implemented in this specific study:

1. treats the learner as the prime source of knowledge about their learning context and how they should respond to it
2. understands the learner as somebody who must finally take responsibility for target-setting and target attainment
3. is iterative, responding to the changing conditions of knowledge among the group
4. is participatory, taking students away from a world of external objective-setting, and inducting them into one in which they can come to frame and own their course destination
5. responds to course need to start a process of reading improvement that can only be completed by students acting independently outside their very limited class time.

This is why PA was used as an innovative instrument for learner-based needs analysis within the learner-centredness in order to achieve the goal mentioned above.

2.7 Summary of Chapter two

This chapter presents a selective review of five main aspects: ESP, learner-centredness, needs analysis, PRA methods and reading in ESP including some recent relevant research studies in ESP reading courses. This was the inspiration for this research study, and why it was subsequently put into practice in an ESP classroom context through the use of PA techniques as an instrument for ongoing needs analysis. The details of this exercise will be described in chapter four and chapter five.

Chapter 3: Research Design and Methodology

Introduction

This chapter discusses how the study was designed: 1) the background of the research design of the pilot and main studies, 2) the research questions of the pilot study and the hypotheses and research questions of the main study, 3) the rationale for the research design and research methodology, 4) the methods of data collection and the research instruments and 5) the processes and stages of conducting the pilot and the main study.

The research project was led by these two main questions.

1. The initial research question: How can PA methods be adapted in order to make students more aware of their target and learning needs especially to help move them towards more self-directed learning in order to improve their own reading skills?

This question leads to the pilot study which aimed to hone or identify methods that worked through action research with qualitative research methodology e.g. action research, participant observation, semi-structured interviews. The action research here focused on the evolution or creation of classroom techniques.

2. The specific main research question: Does the introduction of the evolved PA methods into a class have a positive effect on the development of the learners' self-directed learning and reading skills? And why does it work and why does not it work?

This question directs the main study which aimed to reflect the effectiveness of the implementation of PA methods through action research by qualitative research methods e.g. action research, participant observation and semi-structured interviews and quantitative data i.e. pre/post questionnaires, proficiency tests and follow-up study questionnaires. The action research using classroom techniques evolved in the

pilot study investigates the effect of interaction among the learners and between the teacher and the learners on the acquisition of independent learning and reading skills.

3.1 Background of the research design of the pilot and main studies

This section deals with the background of the research design of the pilot and main studies in relation to their purposes, research questions and hypotheses.

3.1.1 Purposes of the pilot study

As the main objective of the thesis is to test PA methods as a series of methods of needs analysis that were not developed for use in a classroom context but for the involvement of a larger community in the assessment of their own needs, the methods needed to be refashioned for the classroom before their true effectiveness could be assessed. This meant that the pilot study was required in order to:

- examine different PA methods and rework them so that they fitted the classroom context
- explore the methodology through which the effectiveness of these methods could be assessed
- reformulate that methodology for the main study on the basis of that continuing exploration

The pilot study was intended as a trial for both PA methods and the research methods in order that necessary improvements could be made to the research approach and finalised in order to carry out the main study.

3.1.2 Research questions of the pilot study

The research questions of the pilot study arose out of the initial research questions (see figure 3.1) and the literature review. In order to operationalize this pilot study, the initial research question was then translated into the following three practical or operationalized research questions:

***Question one:** Do PA methods enhance learner centeredness as the instrument of learner-based needs analysis to raise the learners' awareness of their target situation and learning needs?*

***Question two:** Do PA methods help move the learners towards more self-directedness?*

***Question three:** Do PA methods help improve learners' reading skills?*

3.1.3 Purposes of the main study

The design of the main study is based on the results of the pilot study (see chapter four). The pilot study demonstrated the effectiveness of PA methods as an instrument of learner-based, ongoing needs analysis in enhancing learner centredness. They effectively raised learners' awareness of their target situation and learning needs, which fostered their active involvement in the learning process, entailing greater responsibility for their own learning. This process helped move the learners toward more self-directed learning so that they could improve their own reading skills. In return, their active involvement in the learning process resulted in improved motivation and more positive attitudes to language learning and self-directedness. These findings of the pilot study led to some adjustments to the design of the main study, realised in these five main purposes:

- a.) to reassess the implementation of PA methods already tested in the pilot study (see the initial research question figure 3.1),
- b.) to examine the influence of the intervention on enhancing learner centredness when PA methods are used as instruments for its learner-based needs analysis to raise learners awareness of their target situation and learning needs,
- c.) to explore the influence of the intervention on the improvement of the learners' attitudes to language learning, self-directed learning and their motivation for language learning.
- d.) to investigate the effect of the intervention on persuading the learners to take responsibility for their own learning in order to move them towards more self- directed learning,
- e.) to study the impact of the intervention on the improvement of learners' reading skills

3.1.4 Research hypotheses of the main study

In order to detect the real effectiveness of the PA methods in depth, the main study employed a wider range of both qualitative and quantitative data collection methods. The quantitative data collection methods aim to respond to the research hypotheses of the main study. The following six hypotheses were formulated out of the findings of the pilot study described in chapter four, the purposes of the main study, the literature review, and the main research question posed in the introductory section of this chapter.

Hypothesis one: *The implementation of PA methods enhances learner centeredness.*

Hypothesis two: *The implementation of PA methods has a positive effect on learners' attitudes toward learning English.*

Hypothesis three: *The implementation of PA methods has a positive effect on learners' motivation for learning English.*

Hypothesis four: *The implementation of PA methods has a positive effect on learners' attitudes towards self-directed learning.*

Hypothesis five: *Learners became more self-directed as a result of the implementation of PA methods.*

Hypothesis six: *The learners' reading skills improved as a result of the implementation of PA methods.*

3.1.5 Research questions of the main study

The research hypotheses of the main study were translated into the following six operationalized research questions.

Question one: *Do PA methods as the instrument of learner-based needs analysis enhance learner centredness and help raise the learners' awareness of their target situation and learning needs?*

Question two: *Do PA methods help learners improve their attitude towards learning English?*

Question three: *Do PA methods help develop learners' motivation for learning English?*

Question four: *Do PA methods help improve learners' attitude towards self-directed learning?*

Question five: Do PA methods help move learners towards greater independence or self-directedness?

Question six: Do PA methods help increase learners' reading skills?

The purposes, hypotheses and research questions of both the pilot and main studies underpinned the decisions regarding research design and methodology.

3.2 Rationale for the research design and research methodology

This section will discuss the rationale for the research design and each research method used in both the pilot and main studies.

3.2.1 Research Design: Case study

This research project originated from real problems in a particular situation. Thus, a case study within an actual class of learners in a real situation is chosen to be the research design of both the pilot and main studies. Those problems are closely related to the following contexts of the research study.

A. English for Specific Purposes (ESP) in Khon Kaen University (KKU)

The course English for Specific Purposes (ESP) at Khon Kaen University (KKU), provided by the Department of Foreign Languages in the Faculty of Humanities and Social Sciences, consists of English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). Technical English for Pharmacy (TEP 411 236), the target course in this research study, is a part of EAP.

These courses are required by almost all of the other faculties in the university, such as the Faculty of Medicine, Agriculture, Architecture, Engineering. Thai is mainly used only as an official language in Thailand; it is primarily English that is used for economic, technological and professional advancement. Thus, reading is the fundamental language skill to be focused upon in these EAP courses. Each faculty

predetermines the objective of its EAP course for the teacher of English to follow. However, within the pre-set objectives, the teacher is relatively free to manage his or her course as he or she prefers in terms of the materials, methodology and assessment.

Similarly, the objective of TEP 411 236 has been predetermined by the Faculty of Pharmaceutical Sciences although again, the course teacher has freedom to choose the materials, the methodology and the types of assessment to suit the needs of the learners and the preset objectives. Thus it is the responsibility of the teacher to determine the best way to address the learners' needs and to help them achieve their learning objectives.

B. Technical English for Pharmacy students (TEP 411 236)

TEP 411 236 is offered to the second- year pharmacy students at KKU. The learners have spent at least 12 years in the formal educational system, within which English is compulsory from the first year at primary level onward, according to the 1996 Thai National Scheme of Education. However, English is studied as a foreign language. It turns out to be a subject whose medium of instruction is mainly Thai, not English itself. The learners spend the first six years in primary level with five periods (20 minutes/period) of English per week and another six years in secondary level with four periods (50 minutes/period) of English per week (Department of Curriculum and Instruction Development 1996). In order to be accepted into a government university, learners need to pass the National University Entrance Examination which is very competitive as only one out of five students achieves a place each year. English is one of the main subjects to pass focusing mainly on reading comprehension and grammatical rules.

Thus, the learners had studied English for approximately 300 hours prior to tertiary level, over a period of from 4 to 6 years, depending on the requirement of

each faculty (e.g. 6 years for medicine, 5 years for pharmacy and 4 years for engineering). In addition, before taking TEP 411 236 in the first semester of their second year, they had passed two English foundation courses in their first year, viz. two periods (50 minutes/period) per week - about 60 hours altogether. They had studied half of the following two course books: 1) A Competency-Based Reading/ Writing Book 5: Language and Culture in Depth and 2) A Competency-Based Listening/ Speaking Book 5: Language and Culture in Depth (Kirn and McKenzie 1991) in each of these two courses. The course books, especially the sections dealing with reading, were intended to prepare the learners for the use of reading strategies at an intermediate level. However whether the learners had an opportunity to practise using those strategies or not depended upon the teacher's methodology. These courses also included the use of self-access centres where the learners were encouraged to learn in a self-directed manner. Again, whether or not learner training and learner involvement were integrated into these courses depended on the individual teacher's methodology. English is not a medium of instruction in either of these two courses, with the exception of those classes whose teachers are native speakers. Thus, there is a very limited exposure to the real use of English in the target situation before the learners take TEP 411 236.

C. Promoting self-directed learning in the target situation

There are two self-access learning centres in the Department of Foreign Languages at KKU. However, there has been some doubt by both the teachers of the language themselves and the subject teachers about the efficacy of the training programme in preparing the learners to become effectively self-directed as well as how to involve learners in the process of training. The use of the self-access centres is integrated with the first two foundation courses but how the learners are prepared and

encouraged to become involved in the learning process to be able to learn in a self-directive manner is not clear. The degree of learner training and learner involvement in the learning process seems to vary from teacher to teacher. This is implied in the work of Chindaprasirt (1997), who conducted research on developing the language-learning strategies of the first- year learners from the Faculty of Associated Medical Science taking the first foundation course in the Department of Foreign Languages. The findings indicated that the learners in the experimental group who were trained to use selective language learning strategies performed better in language achievement tests and their attitudes to and motivation for language learning were seen as having improved when compared with the control group.

In the self-access language centres, the learners are required to complete the study of limited reading materials from 1.) Reading Laboratory Developmental (SRA) and 2.) Reading for Understanding Kit (RFU) within a limited number of hours during the courses. Although the findings from the research of Rujikietgumjorn (1999) and Karnphanit, Jaiboon, Poonpon , Chaiboonruang, Senchantichai, Chaiboonruang and Obyam 1999) in relation to the use of the self-access learning centres in improving language skill, especially the reading skill through self-directed learning, indicated the potential positive effects of these on the achievement and motivation of the first year learners in KKU, they did not offer a methodology as to how the learners could be trained or involved in the learning process to achieve this goal.

There are many factors in the process of training and involving learners to become self-directed. The teaching methodology in almost every subject with which the learners are familiar is still based on a teacher-centred approach with a top-down process of teaching, focusing on learning by rote (Mayers and Sussangkarn 1992; Chaiboonruang 1998 and Rujikietgumjorn 1999). Further, although the learners are to

all intents and purposes young adults, with attendant responsibilities in society, they are much less able to be independent in planning their own study. In accordance with Thai culture, they depend on their parents' financial support throughout their university study. This dependence can in turn influence their planning and decision-making in many ways, including the mode of study which they bring into the classroom in terms of their beliefs about language learning, their capability and their role as learners. This can thus also impede the implementation of self-directed learning in their language course.

This case study aimed to investigate in depth the effects of PA methods on the teaching and learning process when they are proposed as a solution to problems faced in this specific context. It also aimed to help the teacher/researcher to understand how these methods could help to solve each problem occurring in this specific course. This case study was used as a research strategy through the trial of PA methods in real teaching and learning processes in order to discover why a particular method did not work and in order to find an alternative. This argument is supported by Schramm's definition of the case study as a research strategy (1971, cited in Yin 2003: 12): 'the essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result'. Similarly, the real need to find a practical solution for a specific problem is reflected in Marriam (1988: xiii), who advocates the use of a qualitative case study, saying that 'the qualitative case study is a particularly suitable methodology for dealing with critical problems of practice and extending the knowledge base of various aspects of education'. The purpose of investigating in depth the impact of PA methods on the teaching and learning process is also in accordance with her view on the suitability of using the qualitative case study. She

claims that ‘most case studies in education approach a problem of practice from a holistic perspective. That is, investigators use a case study design in order to gain an in-depth understanding of the situation and its meaning for those involved. The interest is in process rather than outcomes, in context rather than specific variables, in discovery rather than confirmation’ (Marriam, *ibid.*: xii). A case study is one of the most suitable methodologies for this research project, to gain an insight into the specific ‘instance in action’ (Adelman, Jenkins and Kemmis 1976:141). Yin (*op.cit.*:13) states that ‘a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used’. Marriam (*op.cit.*: 21) suggests that ‘case studies are particularistic in that they focus on a specific situation or phenomenon, they are descriptive; and they are heuristic- that is, they offer insights into the phenomenon under study.’

Like other ways of doing social science research, the case study has both advantages and disadvantages, depending on three conditions: ‘a) the type of research question, b) the control an investigator has over actual behaviour events, and c) the focus on contemporary as opposed to historical phenomena’ (Yin, *op.cit.*: 1). This research study focuses on how to solve the problems in a particular situation by the implementation of PA methods. Action research was used to find out whether each method worked or not and how to improve upon it. Thus, a case study was considered to be suitable for this purpose of responding to how and why questions as Yin (*ibid.*: 1) states that ‘in general, case studies are the preferred strategy when ‘how’ or ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context. Such *explanatory* case studies can also be complemented by two other types – exploratory

and descriptive case studies'. This research study used multiple case studies to replicate and verify certain phenomena in both the pilot and main studies, and used exploratory and descriptive case studies to overcome traditional criticisms of the method as 'having insufficient precision (i.e. quantification), objectivity, or rigor' (Yin, *ibid*: xiii).

As case studies were used in both the pilot and main studies, each case study will be discussed separately.

3.2.1.1 Case study in the pilot study

The subjects of the case study in the pilot study were three classes of second-year pharmacy students. They were taking the Technical English for Pharmacy or TEP 411 236, in the first semester of the 1999 academic year. These three classes were named Sections One, Two and Three. There were 140 students in total: fifty in Section Two and forty-five in each of the other two sections. The students were grouped according to the results of the English test in the National University Entrance Examination. Section One was supposed to be the most able. Section Two was assumed to be of average ability and Section Three was a more mixed ability group. The learners in Section Three failed the National University Entrance Examination but they passed the KKU examination which was administered after the National University Entrance Examination. This group of learners were under the special program of the Faculty of Pharmaceutical Science because they paid more study fees than the learners who passed the National University Entrance Examination. However, they were entitled to be taught to the same standard as those from the other two classes. The teacher/researcher needed to teach all three classes in the pilot study as the other teachers could not do so without sufficient training and to keep this variable constant. More importantly, it is a university

requirement to provide the same standard of teaching to all learners taking the same course on ethical grounds (see section 3.2.2).

3.2.1.2 Case study in the main study

The subjects of the case study in the main study was one class of second year pharmacy students in Section Two: the average ability group (see section 3.3.1.1) taking TEP 411 236 in the first semester of the 2000 academic year. There were 40 students at the beginning of the course but 39 learners at the end, one student having left the university during the term.

The follow- up of the case study involved the same group of learners who were in their third year of study when the follow- up study questionnaires were distributed to them, within six months and then one year of the end of the course. There were only 38 learners at this time as another student had dropped out.

3.2.2 Research methodology: Action research

As the research project focused on the process than just the product of learning, the need to properly assess the process of teaching and learning which occurred in the class, dictated the choice of research methodology. Thus action research was chosen as the main research methodology to serve this purpose.

Research methodology can be quantitative, qualitative, or both. However, the pilot study was a trial of PA methods in the classroom, the result of which was unknown as it was an exploration. The methodology of the research design of this initial study was largely qualitative, and hence able to describe the dynamic process of learning in depth, whereas a quantitative research design is more suitable for testing predetermined hypotheses. The pilot study itself was intended to reveal the effect of the implementation of PA methods in the classroom context. What emerged from the data collected in the pilot study would then be fully reinvestigated in the main study.

Action research was the main research methodology of the research project because this study originated from an attempt to solve the problems of a particular situation, a scenario which shares the following fundamental characteristics of action research:

- It is 'problem-focused which simply means the process of answering questions by using various kinds of evidence in some kind of reasoned way' Wallace (1998: 15).
- It is 'participant –driven and reflective' and 'context-specific' (McDonough and McDonough 1997: 27)

The process of action research could be repeated in a loop, 'reframing the problem, collecting fresh data, rethinking our analysis, etc.' (Wallace 1998: 17) until reaching a satisfactory solution. Thus, it was suitable for revealing the effectiveness of PA methods within an ongoing developmental and experimental process, equivalent to a spiral of self-reflective cycles in action research which consists of 'planning a change, acting and observing the process and consequences of the change, reflecting on the processes and consequences, and then replanning, and so forth' (Kemmis and Wilkinson 1998: 21). Kemmis and Wilkinson stated that the success of action research is based on researchers' 'strong and authentic sense of development and evolution in their practices, their understandings of their practices, and the situations in which they practice' due to the fluid, open and responsive nature of the action research process in reality. Though involved in the evolution of the methods, the teacher/researcher in this action research found that they positively affected her attitudes to her professional development. Later in this thesis, the use of action research is recommended for personal and staff development (see section 6.3).

The action research employed in this study is participatory action research, as the researcher is a teacher employing participant observation as one data collection technique. Kemmis and Wilkinson (op.cit.: 21) define participatory action research as an attempt to ‘help people investigate and change their social and educational realities by changing some of the practices which constitute their lived realities’. They consider participatory action research as a social and educational process. This concept suits the fundamental principle of both PA methods and learner centeredness in the sense that it ‘offers an opportunity to create forums in which people can join one another as co-participants in struggling to remake the practices in which they interact, forums in which rationality and democracy can be pursued together, without an artificial separation ultimately hostile to both’ (op.cit.: 21). For the learners and the teacher/researcher in this study, many forums have been successfully created through the action research both in the pilot and main studies through PA methods, e.g. brainstorming and negotiation regarding materials, methodology and assessment. For the teacher/researcher and other teachers involved in the project study, especially the main study, a learning forum emerged from several meetings in which the teachers discussed feedback from their classes. We joined together to consider and how we might alter and improve our practice. Kimmis and Wilkinson also refer to ‘a collaborative social process of learning, realised by groups of people who join together in changing the practices through which they interact in a shared social world – the world in which, for better or for worse, we live with the consequences of one another’s actions’ (Kimmis and Wilkinson op.cit.: 21-22). The emphasis on collaboration was carried out in two levels. In the first level, the learning took place through the collaboration between the teacher and learners and among the learners themselves both in the pilot and the main study. The second level occurred through

the collaboration among the teacher/researcher and two other teachers who would teach the same course: TEP 411 236.

In addition, in advancing educational research and establishing various theories or pedagogical methods, it is necessary to relate them directly to classroom setting. Both teacher and learners should be involved in the act of improving the teaching and learning process so that ‘they can explore the realities they faced in the process of curriculum change’ (Burns 1999: 14). Thus participatory action research is suitable for investigating the fluid, open and responsive process of implementing PA methods in order to help learners develop their own learning in this target situation.

The procedures of action research in both the pilot and main studies followed the cyclical plans of action research, i.e. implementation, monitoring, revision and an amended plan. These procedures were consistent with the stages of action research presented by McDonough and McDonough (1997:26) and ‘conceived in terms of a self-reflective spiral, cycle: Initial idea→ Fact finding→ Action plan→ Implementation → Monitoring→ Revision→ Amended plan and so on through a cycle’

There are three layers of action research in this research project.

- 1.) The first layer is the whole project, consisting of the pilot study as the action plan that shapes the research method for the main study as an amended plan.
- 2.) The second layer of the action research was the pilot study itself where PA methods were tried out in order to be adjusted for the main study.
- 3.) The third layer was the main study itself, in which PA methods were implemented in an ESP classroom as the innovative

instrument of learner-based needs analysis to enhance learner centredness by raising their awareness of learners' target situation and learning needs in order to move them towards more self-directedness.

The common purpose of these three layers of the action research is to 'lead to change and the improvements of practice, not just knowledge itself' (McDonough and McDonough, *ibid*: 27) as the findings of the pilot study led to the reformation of the main study. More importantly, each finding in each cycle of the action research led, through the implementation of PA methods, to the improvement of the next cycle in meeting the learners' needs as appropriately as possible.

3.2.3 Ethical issues and the study

Ethical considerations were carefully addressed in both the pilot and main studies. The project employed action research which 'involve(s) the professional practitioner in new sets of relationships with colleagues and clients' (Winter 1989: 23 cited in Burns 1999: 71). Burns emphasises the importance of the way in which relationships are exploited. She states that 'central to these relationships are questions of whether data gathered during the research compromised professional relationships or exploited colleagues and students who may be the subjects of research'. She proposes 'key principles in the ethical conduct of action research i.e. *responsibility*, *confidentiality* and *negotiation*' (Burns 1999:71). Further, Diener and Crandall (1978, cited in Bryman 2001: 479) place the ethical principles of social research –and their transgression- within four major areas as follows:

- 'whether there is harm to participants;
- whether there is a lack of informed consent;
- whether there is an invasion of privacy;
- 'whether deception is involved.'

In this study, all of these ethical principles were carefully taken into consideration. The teacher/researcher was responsible for redesigning the course, which she did before starting this study project about ten years ago. She taught the course for the whole semester, as did other full-time teachers, all of whom had to conform to university requirements. The learners and teachers involved in either the pilot or main studies were clearly informed what the purposes of the studies were. PA methods were also thoroughly explained to the teachers and learners in the statement of course objectives. The implicit idea was direct experimentation on people, i.e. learners, but PA methods directly and continuously addressed the learners' needs in order to help them become more aware of their target and learning needs to become more self-directed learners in order to develop their own learning especially reading skills. The experiment took place within known frameworks of language teaching, though it was outside the more conservative traditions of teaching and learning in the target situation. With a supposition upheld by the positive results in various fields such as sustainable rural development and literacy, the success of the PA method was based on an educational philosophy that 'learning is not usually an outcome of formal teaching. Instead it comes from a process of self-development through experiences' (Pretty, Guilt, Thompson and Scoones 1995: 1). Further, though TEP 411 236 was compulsory, the learners could take the course in another year (as students who fail the course have to do) if they did not want to join the study. However, nobody took up the option to drop out of the course. Additionally, the learners were actively involved in ongoing lesson evaluation in which they could express their opinions and needs freely. An evaluation form was provided with the option of anonymity. Learners were also reassured that their names (if they choose to give them) would not be made public at any stage of the study.

Further, in order to collect the data both the university authorities and the learners themselves were involved in negotiations. The teacher/researcher asked the Department of Foreign Languages for permission to teach in a particular way through a letter including the course map and pre-designed materials for the whole semester, sent to the department before the course started. Negotiation with the learners occurred at the beginning of the course. The ongoing needs analysis/course evaluation form was optional. There was no deception, as PA methods encourage the teacher and learners to openly share information, and negotiate through discussion and ongoing needs analysis/course evaluation throughout the course. Everybody involved in the study had a clear idea of who I was and what I was doing.

Moreover, a contrastive study between the three classes was avoided because of ethical considerations. The teacher/researcher taught the three classes in one semester on ethical grounds and due to the requirements of the university. Ethical considerations limit the possibility of having a true control group. The teacher/researcher realised she would not be able to teach the control group as an ordinary class with the full enthusiasm with which other teachers teach it. If she briefed another teacher to conduct the experiment, there might have been problems of commitment. Further, since the exercise was one of theory formulation, the objective was to respond to both pedagogical failure and success rather than having a straightforward idea and pushing on with it regardless. It would be easier to run a control group on a teaching method such as teaching the verb 'to be' in a different way. But the intervention of PA methods was being tested, which was not related to what everyone did before. Further, some variables were difficult to control in this situation. For example, the teacher/researcher could not have prevented or stopped the learners in the experimental groups from discussing what they learnt in the class with

the learners in the control groups, especially since they were friends who shared dormitories or the same class or laboratory in their department. The control group might also have felt under-privileged. So, there were no control groups.

The university requires learners taking the same course to be treated equally in terms of core materials and assessment. The teacher who has been teaching the course while the teacher/researcher has been studying said that she needed more time to familiarise herself with the new set of materials. Fortunately, the time allocation for each class allowed the same teacher to teach at different times in the same day. So, the teacher/researcher could teach three classes in the pilot study and invited the current teacher to observe the classes as often as she could. The teacher/researcher also invited another teacher in the department who showed interest in this pilot study to observe the classes (this teacher also taught one class in the same course while the teacher/researcher conducted her main study and tried to adopt some of the methods she observed from the pilot study). Whenever they came to observe the classes, the teacher/researcher discussed with them what they had found significant in that lesson. Their comments helped improve the study and were used as a check against data from other sources such as semi-structured interviews and field notes.

Though it was hard work to teach and observe three big classes, the main advantage was the freedom to develop the method, under scrutiny, from an embryonic to a developed state. The teacher/researcher could easily respond to the learners in each class without waiting to discuss with other teachers on the same course. Thus, there was the flexibility needed to adjust the syllabus, materials and methodology to suit learners' needs based on the ongoing needs analysis through the implementation of PA methods throughout the course. An action research study with the implementation of PA methods created a genuine exploratory process throughout the course.

However, it was not only ethical considerations that prevented a contrastive study but the implicit idea that experimentation with people is dangerous. Yet, it was arguable that this study was undertaken within known frameworks of language teaching although ones outside the more conservative traditions of the institute- a supposition upheld by, for example, the success of literacy projects in rural development with PRA methods. (Freire 1972b, 1974; Archer 1994, 1995; Archer and Cottingham 1996a, 1996b, and Robinson-Pant 1995)

All three classes were managed normally as other courses throughout the whole semester i.e. for four months. The learners were told that they were the subjects of the research study, as PA methods encouraged them to collaborate in the teaching and learning process. This concept was in the statement of the objectives of each lesson. It was essential to explain the objectives of teaching and learning with PA methods as a pedagogical method to the learners because they had to know what they were expected to do in participating in the learning process, how they were going to take part and why they needed to do so. They were encouraged to actively participate in the planning, monitoring and evaluating processes.

The teacher/ researcher usually made a note of what had happened during the at each lesson's completion. She also used a videotape recording, but observed that most of the learners felt uncomfortable with it. Some learners stated that they did not like being filmed. So, in the pilot study, the video recorder was used only a few times in each class for some activities which the teacher/researcher thought would help her to capture the dynamic process more thoroughly than her own participation observation such as the activities of reading for pleasure and group work presentation. Further, she wanted to eliminate other distractions, e.g. the technician moving around, as much as possible in order to see the real effect of PA methods. But the audio- tape

recorder was on and unattended in every lesson to back up the field notes taken from each lesson. The two teachers who sometimes came to observe the classes had taught the groups of learners in their first year so the learners were familiar with them. All methods used were based on awareness of ethical considerations.

3.2.4 Criticisms of qualitative research

Both the pilot and main studies employed qualitative research methods but with an awareness of their weaknesses. The weaknesses of qualitative research will be discussed particularly in relation to participatory action research and the case study (see sections 3.3.1 and 3.3.2). Qualitative research is argued to be too subjective and difficult to replicate and to have problems of generalization and a lack of transparency. These criticisms are discussed in Bryman (2001: 276-283). However, it is necessary for the teacher/researcher to use her own judgement when dealing with classroom-based action research.

The teacher/ researcher bore in mind the first criticism, of being too impressionistic with regards to the qualitative findings, which were suggested to be based on researchers' subjective and unsystematic views of the focus of the study. She was aware of the need to be systematic and critical in deciding upon the main focus of the study to gear it to the fundamental purpose of this participatory action research, i.e. for practical development in a classroom. Possible solutions were explored through a wide range of processes for collecting and analysing data relating to the improvement of the situation dictated by the real problems in the target situation. Four fundamental objectives of using action research in the form of a case study, 'solving problems, applying theories to practices, generating hypotheses and providing illustrations' (Wallace 1998: 164) were systematically applied in this study as it was realised that conducting this classroom-based research study 'requires the ability to

look at evidence of our own practice in a more detached and objective way than we normally do' (op.cit.: 1). Thus, an awareness of the problem of subjectivity meant that action research was interpreted as a variety of techniques approaching a single case study from multiple perspectives. In an attempt to make the qualitative data more objective, they were triangulated with quantitative data (see below).

The second criticism of qualitative research relates to a lack of transparency or an unclear procedure for collecting and analysing data as well as arriving at its conclusions. This leads to the problem of its findings being difficult to replicate, as it appears unstructured since it is sometimes difficult to know what has actually been done at each stage of qualitative research. Moreover, a variety of variables in Social Sciences cannot be definitely controlled. Thus, the ideas of a straightforward replication of a case study could be inconclusive and ethically dubious. Also, the ways of solving problems according to the needs of the learners in this situation might be totally different in other situations due to the concept of individual differences and the uniqueness of each class.

With respect to these two main issues, the idea of the relatability of the research findings to similar settings should be more important and desirable than that of replicability of the research findings, as long as there is a theoretical standard for its procedures and findings (Bassaey 1981). Further, whether what is set to be observed is actually observed should be the main focus as a basis for general application (Nunan 1992).

The third criticism relates to the restricted scope of the findings of a case study with a small number of participants in a locality that thus cannot be representative of all cases or cannot be generalised to other settings. However, this criticism is strongly contested by many people. Bryman (op.cit.: 283) argued that 'the

findings of qualitative research are to generalise to theory rather than to populations or it is the quality of the theoretical inferences that are made out of qualitative data that is crucial to the assessment of generalization'. It is logical that the cogency of the theoretical reasoning (Mitchell 1983: 207, cited in Bryman: op.cit.) is the more important criteria in considering the generalisability of qualitative research findings than statistical criteria of quantitative research findings. This is because the fundamental characteristics of a qualitative case study are its uniqueness, its specific focus, the strength in reality of its data and the recognition of the complexity of social truth and alternative interpretations (Nunan 1992; Wallace 1998; Stake 1988; Adelman, Jenkins and Kemmis 1976; McDonough & McDonough 1997). The overall concept of advocating the importance of the insights provided by the research rather than its generalisability is summed up by Stake (1988:256):

‘The principal differences between case studies and other research studies are that the focus of attention is the case, not the whole population of cases. In most other studies, researchers search for an understanding that ignores the uniqueness of individual cases and generalizes beyond particular instances. They search for what is common, pervasive, and lawful. In the case study, there may or may not be an ultimate interest in the generalizable. For the time being, the search is for an understanding of the particular case, in its idiosyncrasy, in its complexity’.

The teacher/researcher agrees with this concept, since she attempts in this research project to gain insight into an instance of reality in order to acquire valid data. The findings may be relatable to similar situations, but that is not their main purpose: the findings may be unique as they arise from a unique situation.

3.3 Methods of Data collection

The research methodology also includes the methods of data collection. The pilot study focused on qualitative data while the main study used both qualitative and quantitative data. However, both the pilot and main studies used the same methods of data collection for specific purposes, and each method will be discussed:

1. Pilot case study:

The pilot study was considered to be one data collection opportunity for this research project. It was the trial of both the research methodology and PA methods as a pedagogical method, so that improvements could be made in main study. The pilot case study was the final stage of preparation and refinement of the main study's data collection both in terms of its content and procedures. Thus, the pilot case study in this research project was used to develop relevant sets of research questions and clarifying some concepts of the research design.

2. Adapted PA methods

All seven PA methods (see section 2.2.3) implemented in both the pilot and main studies are considered as methods of data collection as well, because they were treated as the innovative instruments of learner-based needs analysis.

3. Participant observation

While using a case study to understand in depth the situation in all its uniqueness, participant observation was chosen as another data collection method. It was intended to collect rich qualitative data to reveal the complex phenomenon of a classroom because this action research focused on intervention in a situation (i.e. the case study) in order to try to improve it. Thus, in order to obtain depth of detail of occurrences in the classroom, the researcher took the role of a teacher in this action research in collecting the data through participating and observing in the actual

setting. That is, in teaching and learning processes, the researcher/ teacher participated as an insider and observed as an outsider. It was her intention to seek to understand the learners' needs as if she were one of the learners. However, the teacher/ researcher as a participant observer did not only observe and analyse the learners in order to make sense of their needs or 'immerse herself in a group for an extended period of time, observing behaviour, listening to what is said in conversation both between the others and with the fieldworker, and asking questions' (Bryman, 2001: 291) but also intervened in the situation in order to improve it through discussion and negotiation within the limited time and resources and to carry out planned initiatives.

The data from this participation observation were recorded in the field notes. It was used to complement the data from audio and video recording to be presented as qualitative data in the form of a story or narrative of an unfolding process of interaction between people with the effect of the intervention.

4. Semi-structured interviews

Another qualitative data collection technique used in the pilot study was the semi- structured interview. This technique was used in four phases of the pilot study i.e. before, at the beginning of, during and at the end of the course, while only the later three phases were used in the main study.

5. Pre/Post tests

Although all learners who had passed both English foundation courses in the first year were assumed to be at intermediate level, the definition of 'intermediate' is relatively broad. It was necessary to know the level of learners' current language ability in order to design the course to suit it. The International English Language Testing System (IELTS), used as a standard test due to its global acceptance, was initially intended to measure the reading level of learners at the beginning of the

course. However, it was also used to detect if there was any reading improvement at the end of the course. Thus, it served as the pre/post for both the pilot and main studies. Specimen material from the Academic Reading Module's updated version of November 1997 was used in the pilot study, but the 2000 test version was used in the main study as it was considered more relevant in terms of the topic and data.

6. Questionnaires

Questionnaires were used to collect data both in the pilot and main study. In the pilot study different sets of questionnaires were used for the initial needs analysis and the course evaluations at the end of the course, while the same set of questionnaires were used as the pre and post questionnaires in the main study as well as for the follow- up studies six months and one year after the course.

7. Audio and Video- tape recording

Both the pilot study and main study used audio and video- tape recording to collect data during the teaching and learning process. While every lesson in the main study was video-recorded, only some specific lessons in the pilot study were, due to the limited budget. However, every lesson in the pilot and main study was audio-recorded to assist the teacher /researcher in taking notes after each lesson in order to narrate what really happened in class.

Video recording every lesson was feasible in the main study as there was only one class of learners, in contrast to the pilot study in which the video recorder was used only occasionally because of the reluctance of the learners and the ethical need to take this reluctance into account. The teacher informed them of the purpose of this study, and that every lesson would be recorded, at the start of the course. Thus, the learners were supposed to grow accustomed to this as no lesson was treated as special. This long continuing process aimed to reduce the Hawthorne Effect, whereby the

awareness of participation with special attention to the research hypothesis might affect subject performance (Borg and Gall 1989). Video recording every lesson throughout the course was considered advantageous, because the researcher as teacher wanted to acquire more detail and different perspectives of learners' responses in action that might be unnoticed from observation during the class. It would also be useful for comparison with data from other sources. The data from the video recording were used in combination with the data from the field notes of the participant observation, the feedback from lesson evaluation as well as conversation with the learners both inside and outside the classroom.

3.4 Research Instruments

This section discusses the main research instruments used in the pilot and main studies.

3.4.1 Research instruments in the pilot study

The main research instruments in the pilot study are the questionnaires, the semi-structured interview questions and the ongoing learner-based needs analysis/course evaluation form.

3.4.1.1 Questionnaires of initial needs analysis

This questionnaire forms part of another method of carrying out needs analysis such as ongoing learner-based needs analysis undertaken throughout the course, semi-structured interviews or group discussion. Questions relating to both the objective and some subjective needs of the learners were asked, such as types of texts needed to learn, their purpose in using the target language, problems in learning and their preferences for learning, in order to pre-design a course that was more responsive to their needs. However, the subjective needs analysis was focused on during the course

(see section 2.1.2). This initial needs analysis also included other types of needs analyses from the semi-structured interviews with both the learners and subject teachers to group discussion between the teacher and target learners prior to the course. The result of the 1997 needs analysis (see appendix 1) was also taken into consideration for the course design. Thus, this initial needs analysis was considered to cover the fundamental target needs of the learners.

150 (33.33%) out of approximately 450 (100%) of the learners from the first to the fifth year were selected as samples of the population to complete the questionnaires. 95 (63.33%) out of 150 (100%) questionnaires were returned. The subjects were chosen according to their grades in the first English foundation course in their first year. The first year learners had just finished their second English foundation course. The main focus of this needs analysis was on the first year learners who were going to take TEP 411 236 (June 1999). As well as filling in questionnaires, the selected learners were interviewed in more detail and discussed the planning of the course with the teacher before the course (see section 4.1.1.3).

Within the year, the learners were categorised into three sets: top, middle and lower according to their grades in the first foundation course. From each set, ten learners were selected. Thirty samples from each year totalled one hundred and fifty. The method of distributing the questionnaires and selecting the subjects is summarized in the following table.

Table 2. Summary of the method of distributing the initial questionnaire

Year of study	Set A	Set B	Set C	Total
First year	10	10	10	30
Second year	10	10	10	30
Third year	10	10	10	30
Fourth year	10	10	10	30
Fifth year	10	10	10	30
Total	50	50	50	150

The first part of the questionnaire regards general information about the learners, with blank spaces to fill. The second part regards their needs, problems in learning and preferences for learning styles, which they were required to express through a modified six-point-rating scale: 1- strongly disagree, 2- disagree, 3- rather disagree, 4- rather agree, 5- agree and 6- strongly agree (see appendix 3).

3.4.1.2 Questionnaire for course evaluation by the teacher

This questionnaire, used in the pilot study as a course evaluation form by the teacher/researcher, was distributed to the learners at the end of the course. The main purpose of the questionnaire was to investigate the learners opinions on the implementation of PA methods, focusing on the concept of learner empowerment which underpinned the methods of teaching and learning in order to move them toward more self-directed learning. Also, the results were expected to be a useful source for the research hypotheses of the main study.

Questionnaires were distributed to all the 140 learners in the last week of June 1999 at the end of the course. The learners were asked to give their opinions using the same modified six-point-rating scale described above (see section no. 4.3.3).

3.4.1.3 Questionnaires for course evaluation by the university authority

This questionnaire was carried out both in the pilot and main study by the Faculty of Humanities and Social Sciences. During the last week of the fourth month, before the end of the course, a staff member from the administrative office of the faculty distributed the questionnaire to the learners in the class and collected them immediately after the learners had completed them. The teacher/researcher did not have any control over this questionnaire and evaluation. Neither the teacher nor the learners knew the date on which the questionnaire would be distributed. This

approach appeared to investigate whether or not a course interested its learners at the last stage of the course. The questionnaire was also anonymous and clearly stated that any information given by the learners would not effect their grades. The questionnaires were analyzed and approved by the faculty authorities, and the result was sent to the head of the department for approval. The result was sent to the teacher after the learners' were officially given their grades.

There were 13 items in the questionnaire emphasizing the teacher's performance in general. However, more than half (eight out of thirteen) of the items could be seen to reveal the effectiveness of the implementation of PA methods. Items no 1, 6, 8, 9, 10, 11, 12 and 13 investigated the concept of learner empowerment in promoting learner involvement in the learning process. The result of this questionnaire could be seen to reflect how well the learners' needs were catered for.

The questionnaires were distributed to the learners in three classes in the pilot study. The number of respondents in each class were 42 out of 45 (93.33%) in class one, 39 out of 50 (78%) in class two and 38 out of 45 (84.44) in class three. The questionnaire is divided into two main parts. The first part regards the learners' perceived percentage of their class attendance ranging from >90% to 80-89%, <80% and <50%. The second part contains 13 items requiring them to express their opinions through a modified five-point-rating scale: 5- strongly agree, 4- agree, 3- moderately agree, 2- disagree and 1-strongly disagree (see section no. 4.3.4).

3.4.1.4 Questionnaires for semi-structured interview for the initial needs analysis

With respect to Table 3.1 in section 3.4.1.1, thirty students (two from each set of learners in each year who filled out the questionnaires) were selected for semi-structured interview as well as six subject teachers who were representatives of each

department. Two different sets of questions were used for the learners and teachers (see Appendix 3).

3.4.1.5 Questionnaires for ongoing learner-based needs analysis

There were two types of questionnaire for ongoing learner-based needs analysis throughout the course. The first type was the lesson evaluation form distributed to the learners twice a week at the end of each lesson. The learners were required to recount what they had liked/disliked and their suggestions for improvement for the next lesson. The second type was the weekly journal form asking the learners to express their opinions about the lesson that week and how they had improved their learning through self-directedness using four questions and suggestions (see Appendix 4).

3.4.1.6 Main questions for semi-structured interviews during the course

During the course, there was a semi-structured interview with some learners who had difficulties adjusting themselves to the class. The main questions related to their problems and how to solve them (see Appendix 5. Part A.).

3.4.1.7 Main questions for semi-structured interviews at the end of the course

At the end of the course, the teacher/researcher conducted a semi-structured interview with a sample of learners from each class. Its main purpose was to investigate the effect of the implementation on the learners, in relation to their attitudes toward the methods used and the effect of these on their self-directed learning, the improvement of their reading skills and their attitudes to and motivation for learning English (see Appendix 6 Part A).

Forty-five learners (five from each class) were selected as samples. Within each class, the learners were categorised into three sets: top, middle and lower

according to their scores in the mid term examination and the results of the participant observation by the teacher who judged whether learners appeared to develop faster or slower than the majority or at average level.

The method of selecting sample learners for semi-structured interview at the end of the course is summarised in Table 3.

Table 3. Summary of the method of selecting samples

Class no.	Set A	Set B	Set C	Total
Class one	5	5	5	15
Class two	5	5	5	15
Class three	5	5	5	15
Total	15	15	15	45

3.4.2 Research instruments in the main study

In order to correctly evaluate the usefulness of the learner training within the research carried out for this study, bearing in mind the limited time and resources available, the areas to be evaluated in designing the questionnaire were based on the criteria suggested by Wenden (1986c:323): ‘1) learner attitudes: has the learners’ appreciation of learning training changed? 2) skill acquisition: has the learning skill been learned? 3) task improvement: does the acquired skill facilitate performance of the language task? 4) durability: does the skill continue to be utilised? and 5) transfer: is the skill utilised in a similar context?’ This led to three types of questionnaires: pre/post questionnaires and two different sets of follow-up study questionnaires as the modifications of the pilot study. The questionnaire for course evaluation by the Faculty of Humanities and Social Sciences is also counted in the main study.

3.4.2.1 Questionnaire for course evaluation by the university authority

This questionnaire is the same as that presented in section 3.3.6.1.4. In the main study only one class -section two- was the case study. 34 (87.18%) out of 39 (100%) learners filled in the forms (see section 5.3.4).

3.4.2.2 Pre/Post questionnaires

Pre-course questionnaires were used to obtain data before the implementation of PA methods and post-course questionnaires were used after the implementation ended. They were used to detect whether there was any change in these five major areas:

- 1.) Learners' attitudes towards learning English
- 2.) Learners' motivation for learning English
- 3.) Learners' attitudes towards self-directedness
- 4.) Learners' preference for learning styles and confidence in self-directed learning
- 5.) Learners' opinions on reading and their reading practices in general

The questionnaire was divided into six main parts. Part one covers general information about the learners and the other five main parts are the areas mentioned above. In parts two to five the learners are asked to rate either a positive or negative statement using a modified Likert scale with a seven-point-rating scale: '1- strongly disagree', '2- moderately disagree', '3- slightly disagree,' '4- neutral', '5- slightly agree', '6- moderately agree', '7- strongly agree'. Thus the learners are free to express a neutral opinion if they don't feel positive or negative toward a certain statement (see Appendix 6).

3.4.2.3 Questionnaires for the first and the second follow-up studies

In order to detect changes in the learners' attitudes to and motivation for language learning and self-directedness, as well as the progress of self-directedness six months and then one year after the course, the same set of questionnaires was used for the first and second follow-up studies.

The questionnaire was administered twice by one of the researcher's colleagues in the target situation. The first follow-up questionnaire was distributed to the learners at the beginning of March 2000, six months after the course when the learners were in the second half of their second year. The second one was provided to the same group of learners at the end of September 2000, one year after the course when they were in the first half of their third year. Both sets of questionnaires were returned to the teacher/researcher in the UK to be analysed. The purpose was to detect whether there was any change in the main areas in the research hypotheses and research questions as well as the direction and level of the change, e.g. learners' awareness of their own needs, their attitudes to learning English and to self-directed learning and motivation for learning English, confidence in self-directed learning and application of what they learned in the course.

The questionnaire consisted of ten questions. The first nine statements (including two sub-statements in item eight) investigated changes in attitudes to and motivation for learning English and self-directedness as well as reading ability. They were constructed with modified five Likert scales indicating the degree of change, and then compared with data collected during the course. The scales ranged from '5- much more', '4- more', '3- moderately', '2- less' to '1- much less'. The respondents were also required to make comments on each statement. The last statement –number 10 - was open-ended, asking for: a) the three most preferred learning activities or skills/strategies which helped improve self-directedness and b) the three most transferred skills or strategies frequently used in their real-life situation (see section 5.3.5). The analysis of the results was based on their frequency of use according to the numbers of responses.

3.4.2.4 Questions for the structured interview for the third follow-up study in the main study

The third follow-up study eighteen months after the course, was a structured interview with two questions:

1. *Have you read English more in your higher year of study?*
2. *Do you think TEP 411 236 helped you to read better?*

The teacher/researcher asked two of the learners with whom she still maintained contact after the main study, mainly through e-mail communication, to conduct this interview for her. These two learners are still in touch with the teacher/researcher who was therefore able to get further feedback from them after the course. One of the learners said that she needed to read a lot of English texts for many assignments in her fourth year. In view of this statement, and to track the learners for a longer period in order to investigate the effect of the intervention in their higher year, the teacher/researcher took this opportunity to carry out another follow-up study, focusing particularly on the fourth year in which English was required for most assignments in learners' special subjects, according to the findings of the needs analysis in the pilot study. The main purpose was to find out if the course had been helpful for them and whether they read more in English. The learners were considered to be reliable and responsible. In order to triangulate the data from different interviewers, both learners were asked to help each other interview the other learners who had taken the target course. They then sent the results to the teacher by email in the middle of June 2002 after they had completed the interviews.

3.4.2.5 Questionnaires for ongoing learner-based needs analysis

Three sets of questionnaires for ongoing learner-based needs analysis were used throughout the course. The first questionnaire was the lesson evaluation form

distributed twice a week to the learner at the end of each lesson. The second questionnaire was the weekly journal requiring the learners to describe their needs, opinions and self-directed learning management. The third questionnaire was the monthly evaluation form (see appendix 8).

3.4.2.6 Questions for semi- structured interviews during the course

During the course, there were semi-structured interviews with two main types of learners who either appeared to have difficulties in adjusting themselves or who showed they could adjust themselves very well in class. The main questions related to their problems or strategies in adjusting (see Appendix 5 Part B).

3.4.2.7 Questions for semi- structured interview at the end of the course

At the end of the course, the teacher/researcher conducted a semi-structured interview with all the learners, who took turns to come either individually, in pairs or in a small group. The main questions involved the effect of the course on their perceived attitudes to and motivation for learning English and their attitudes to self-directed learning as well as perceived reading skills (see Appendix 6 Part B).

Finally, it is important to clarify two particular points concerning how the quantitative research questionnaire was constructed and how a large number of qualitative data were dealt with. I start with the quantitative research instruments. The questionnaires were mainly adapted from the work of Oskrsson (1980), Hutchinson and Waters (1987), Khuwaileh (1992) and Haque (1989). They had been tried out with 5 graduate Thai candidates doing master and doctorate degrees at the University of Durham. The questionnaires were tried out again with 5 undergraduate students at Khon Kaen University before actual field work. Then relevant statistical methods were used that were appropriate for a particular set of the data.

The qualitative data gleaned from each lesson and subsequent interviews were processed using an analytical method based on grounded theory. Grounded theory has been defined by Strauss and Corbin (1998:2) as method where ' data collection, analysis, and eventually theory stand in close relationship to one another.' Also, Bryman (2001:390) stated that 'two central features of grounded theory are that it is concerned with the development of theory out of data and the approach is iterative or recursive as it sometimes called, meaning that the data collection and analysis proceed in tandem, repeatedly referring to each other.' The two main tools of grounded theory used were coding and constant comparison in order to get the outcome in form of the concepts and categories that emerged from the narrative of classroom events. The concepts were derived from my project objective, namely the implementation of a new method of needs analysis for ESP i.e. PA and the way in which this new method was adapted to the unfolding scenario of course. The categories proposed were a continuum of the perceived success or failure of the intervention. The presentation of both qualitative and quantitative data is in Chapter Four and Five.

3.5 Summary of research project structures

The structures of the whole research project, of the pilot study and of the main study are summarised in Table 4.

Table 4. Structure of the research project, the pilot study and the main study

The structure of the whole research project	The structure of the pilot study	The structure of the main study
<p>Initial ideas 1 (Problems) (Stages of fact findings were carried out informally and then formally)</p> <p>↓</p> <p>Initial ideas 2 (Finding solutions) (Possible research methods to reflect what actually happened in class.)</p> <p>↓</p> <p>Action Plan (Pilot Study: PA methods were tried out as a pedagogical method in a classroom through three main steps: implemented, monitored, revised)</p> <p>↓</p> <p>Amended plan (Main study)</p>	<p>A target situation needs analysis to determine the areas in which the learners needs to work and learning needs analysis to design modes of study appropriate to the institutional context</p> <p>↓</p> <p>A systematic adaptation of PA methods to the classroom</p> <p>↓</p> <p>A course design and a set of materials to be oriented to preliminary assessment of the learners needs</p> <p>↓</p> <p>A preliminary needs assessment designed to provide a sound basis for the course and material used</p> <p>↓</p> <p>A classroom experiment with PA methods through on going-needs analysis/course evaluation which constantly adjusting the course and making the learner needs clear to them</p> <p>↓</p> <p>Evaluation (final evaluation of the whole process) and then conclusion leading to the adjustment for the main study</p>	<p>The findings from the pilot study</p> <p>↓</p> <p>Adjustment to research questions, methodology as well as materials adapted and adapted PA methods</p> <p>↓</p> <p>Implementation of PA methods through an on-going needs analysis/ course evaluation and qualitative data collection</p> <p>↓</p> <p>Quantitative data collection</p> <p>↓</p> <p>Analysis data both qualitative and quantitative data</p>

3.6 Research stages for conducting the pilot study

As the study was an action research study which introduced an on-going adjustment to all the methods used, the initial plans were flexible. For example, the syllabus, materials, and methodology both in the form of teaching and learning methodology and research methodology, were open to possible changes. The process began with the literature reviews in order to find relevant methodology for the research project, then progressed to experimentation with the chosen methodology and data analysis. It ended with the adjustment to the main study. The research stages of the pilot study is summarised in Figure 6.

Figure 6. Summary of the research stages of the pilot study

Stage1. 1.Before the course: Literature reviews and preparation of the research instruments

Activity: Reviewing relevant literature between October 1997- March 1998

Stage 2. During the course: Fieldwork

Activity: Undertaking action research and collecting data between June 1999 and September 1999

Stage 3.After the course: Data analysis

Activity: Analysing data from the pilot study and preparing for the main study between October 1998- and March 1999

3.7 Research stages for conducting the main study

The findings of the pilot study were evaluated and led to some adjustment of the main study in terms of the formation of the research hypotheses and the reformation of the main research questions. This includes the triangulation of the research instruments with quantitative data collected at the end of and after the course (the follow-up studies) in order to corroborate the qualitative data (see section 5.3). The adjustment is reflected in the stages of conducting the main study.

The stages of conducting the pilot study began with the relevant literature reviews and ended with evaluation of the findings for the adjustment of the main study, while the main study started with the adjustment of the findings from the pilot study, including updated related literature reviews, and ended with analysis of the data collected both from the fieldwork and from three follow-up studies. The follow-up studies attempted to investigate the impact of PA methods on the learners' language use in real-life situations, e.g. reading English texts and journal articles for assignments in their higher years of study. They helped to detect whether they had transferred what they had learnt from the course to the new situation or not. The stages of conducting the main study is summarised in Figure 7.

Figure 7. Summary of the research stages of the main study

Stage 1. Before the course: Preparation for the main study

Activity: Adjustment to the main study and updating the related literature reviews between October 1999 and May 2000

Stage 2. During the course :Fieldwork

Activity: Undertaking action research and collecting data between June 2000 and September 2000

Stage 3. After the course: Follow up study

Activity: Getting feedback from the learners in their new situation in March 2000 and September 2001

3.8 Summary of Chapter three

The chapter explains how the research project was designed and carried out in the forms of the pilot and main studies. The rationale for the research methodology was discussed, based on the literature and how it was applied. The research study was undertaken as case studies through action research to elucidate the impact of the implementation of PA methods on learner improvement.

There were two phases of the research study, i.e. the pilot and main studies. The pilot study was undertaken to test both the research methodology and PA methods so that the main study could be modified accordingly if necessary both in terms of the methodology and the research hypotheses and questions. The methodology of the main study and the way in which the research hypotheses and questions were finalised was discussed step by step. Though the research design and methodology, i.e. action research case study, are the same in the pilot and main studies, three more quantitative research instruments, i.e. the pre/post questionnaire and the follow-up studies questionnaires, were added in the main study to illuminate the qualitative data and for data triangulation. The cases and their contexts both in the pilot and the main study as well as the processes and stages of conducting them were presented chronologically. The result of the pilot and main studies are presented in chapters four and five respectively.

Chapter 4 Pilot study

Introduction

This chapter deals with the presentation and discussion of the data from the pilot study in three phases: planning, implementation and evaluation. Each set of findings is discussed in response to each research question. Conclusions were drawn showing how to set up the main study.

4.1 Data presentation in phase one: planning

There are three main phases to the pilot study: planning, implementing and evaluating. This section presents the data of phase one: planning undertaken before the start of the course. This was divided into two major steps: needs analysis and course design. The planning phase is summarised in table 5.

Table 5. Summary of the planning phase of the pilot study

Planning phase	Needs analysis (An initial needs analysis on (learners' objective needs) + Present situation analysis (proficiency test) + strategy analysis + means analysis (organisational factors, material factors, participants, classroom culture)	Course design (1.course objectives 2.course outline 3.number of hours 4.numbers of units and the descriptions 5.methodology)
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4.1.1 Objective needs analysis

The objective needs analysis in this research project was carried out before the course in 1999 (see section 3.5). Though it focused on the target situation needs of the learners, some questions in the questionnaires and semi-structured interviews dealt with other aspects such as the learners' learning problems and preferences for learning styles.

4.1.1.1 Results of the pre-course or initial needs analysis

Three main sets of data are from: questionnaires, semi-structured interviews, and small group discussions prior to the course.

4.1.1.1.1 Results of the 1999 initial needs analysis

95 (63.33%) out of 150 (100%) questionnaires were returned (see section 3.3.6.1.2). The results are summarised in two parts: learner background and summary of responses.

I. Learners' background

The respondents are mostly females with an average age of 21. Before TEP 411 236, they had studied English in school for about 12 years with approximately 600 hours spent in general English courses.

II. Summary of the responses

The responses to the questionnaire were presented in the order of most common responses from the learners from the first year to the fifth year as shown in table 6.

Table 6. Summary of the results of the second initial needs analysis

Main point in each question	Main findings
1. Main reading purposes	Mainly for current university study and professional advancement
2. Type of texts needed	General adapted texts for the first and second year Authentic technical texts for the third, fourth and fifth year
3. Most difficult type of text	Authentic technical texts such as excerpts from specialist texts, pharmacopoeias and professional journals for learners of all years
4. Topics needed	Topics directly related to pharmacy or selected from their specialist texts
5. Language skills needed most for current study and future work	Speaking /listening for the first year but reading for the others

6. Language skills needed to improve most	Speaking/listening skill for every year Reading for the fourth year including writing for the fifth year
7. Language of classroom instruction needed	More English than Thai for all years but English only for the third year
8. Preferred learning styles	Pair or small group work for all years with more self-directed study for the fourth and fifth year
9. Preferred learning activities	Reading aloud and reading for presentation for the first year but reading for exchanging information and problem solving for the others
10. Causes of reading difficulty	Technical terms for the first and third year learners, but reading strategies and grammatical points for the others
11. Reading technique most frequently used	-Drawing inferences, reading for gist and specific ideas for the first and second year -Word by word translation, reading for gist and specific ideas and guessing from context for the others
12. Most difficult reading technique	-Drawing inferences for the first year -Interpreting and inferring as well as differentiating facts from opinions for the others
13. Technique needed to improve reading	-Integrated skills through various activities through self directed learning and teacher's support for all years -Focus on extensive reading for the fourth
14. Factor influencing reading improvement	-A teacher for the first and third year but a learner himself for the others
15. Opinions on other English courses if offered	-English courses focusing on different skills such as speaking/listening and writing for each year

The findings show that English was most immediately needed for current university study along with future professional advancement, though speaking/ listening skills were always seen as needing improvement, as revealed in findings 1, 6 and 15.

The needs analysis identified and emphasized the real needs of the first year learners who were to be the case study of the main study. The findings focused on analysing awareness of target and learning needs. It was found that the first and

second years were not fully aware of their target needs (see questions. 2 and 5). For example, while the other years strongly stated the need to read authentic technical texts, the first and second year learners stated that they needed to read general adapted texts most. Similarly, while the learners in the third and fourth years gave priority to reading skills, the first year learners emphasized speaking and listening skills.

The learners had shown some degree of awareness of their learning needs with respect to questions 7, 8, 9, 13, 14 and 15. For instance, they largely accepted English as the medium of instruction in class and realised that more English courses in their higher years of study would help improve language skills, especially the speaking /listening that they wanted most. This awareness was also reflected in the way in which their most preferred teaching methods required active involvement in the learning process in the case of pair or small group work and reading for presentations. Though the first and third year learners agreed that they themselves were responsible for learning, only those learners in the fifth year evidenced a real awareness of the need for self-directed learning. The real need for reading strategies was demonstrated by the lack of relevant understanding among the higher year learners. They also showed signs of reading problems in the findings from questions 11 and 12.

The findings of questions 3 and 4 showed that the preferred topics were those directly related to the learners' field of study, but they found authentic technical texts the most difficult to read. This was closely related to the findings of question 10, that inadequate skills for coping with technical terms and complicated sentence structures meant that reading authentic texts was the skill they found most difficult.

In sum, the findings from the questionnaires of the first and second objective needs analyses were similar. They were both used for planning the course design, focusing on pre-planned materials and methodology. These were subject to change in

light of the results of on-going subjective needs analysis throughout the course (which will be presented later in this chapter).

4.1.1.2 Results from the semi-structured interviews

Semi-structured interviews were carried out with both current learners and subject teachers by the teacher/researcher (see section 3.4.2.3). The results were separated into two sets: those from the learners and from the subject teachers:

I. Learners' results

The interviewees were randomly selected from the respondents to the questionnaire from the first year to fifth years in accordance with the three sets of respondents (see section 3.3.6.1.2). So, there were 9 from each year and 45 in total. The semi-structured interviews were conducted in small groups as this was considered to be less threatening than individual interviews, and discussions were encouraged. Data analysis was based on the main questions (see Appendices 3). They are summarised and presented as follows:

a. Attitudes towards reading in general

Most did not like reading in general, and did not read frequently either in Thai or English. They rarely read books or magazines for pleasure but sometimes read comics, mostly Japanese comics, translated into Thai. They found English too difficult to read for pleasure and read it only in order to pass exams. They claimed to realise the importance of English for their studies and professional development but rarely reached their desired language learning goals and felt frustrated by this lack of success.

b. Learning experiences

Despite studying English for more than ten years through traditional grammar translation, most of the learners perceived their reading ability to be average or lower

than average, though the meaning of average was not given. They showed interest in learning by negotiation and actively taking part in the learning process because they thought it might make language learning more interesting and motivating. The fifth year students strongly supported this idea and suggested using self-assessment to promote active participation in the learning process. They realised that grammar translation was not effective enough to help them to become competent readers as reading English texts and journal articles had been a real struggle for them.

c. Self-directed learning

Though they had experienced self-directed learning in self-access centres in their first two English foundation courses, they stated that they did not think they were prepared to be effective self-directed learners. They stated that they had never had any chance to negotiate what and how to learn with their teachers. They thought it was necessary to be trained in how to become self-directed learners. They knew this would involve more than the completion of required assignments provided in the self-access centres. There was no decision-making in respect of their learning as everything was pre-set by the teacher. They accepted that self-directed study was crucial due to the time constraints of the course, but needed to be helped to become self-directed.

d. Motivation for learning English

The greatest motivation for learning English was to pass the exam. They hardly considered reading English for pleasure but were at the same time dissatisfied with their reading ability and other language skills. Moreover, English was a subject with fewer credits than many of the specialist subjects required for their degrees. Thus, it was unlikely that the learners would put as much effort into English as into

the specialist subjects. However, they still needed to become competent readers and speakers of English.

e. Expectation of the target course: English 411 236

They wanted to be able to use English for their real functional needs, e.g. to be able to read authentic texts for current study and future work. A third-year student openly stated that she had had to pay for translation of texts she found incomprehensible when the deadline for project completion was too near to use word by word translation. They wanted the course to be more effective and also interesting enough to help them enjoy learning English, as well as to show them how to develop their language skills to become independent and competent learners. This put pressure on the tutors to design a motivating course.

f. Resources and time

The learners claimed that it was not easy to access the relevant reading materials -especially those in English- as they were not available or were too expensive to buy. They generally used the faculty library and sometimes the university main library (most of them admitted that this was partly because they liked being in air-conditioned rooms). They did not have much time, since they attended classes from 8 a.m. to 4 or 5 p.m. every weekday.

g. Background knowledge

The fourth year students suggested TEP 411 236 should be moved from the second year to the third or fourth year. All of the subjects studied in the first and second years were undertaking foundation courses that did not focus on their specialist area of study. The target learners did not have enough background knowledge to deal with authentic pharmaceutical texts effectively. The course seemed

too advanced for them, because they had to read authentic technical texts such as journal articles and subject texts in English that would be needed in order to complete assignments from the fourth year onwards. This poor instructional sequence meant they were dealing with texts that were not only difficult linguistically but also beyond their academic knowledge at this stage.

II. Subject teachers' results

The themes of the data analysis were based on the main questions asked (see appendix 3):

a. Their perception of learners' problems

The teachers all agreed that their students' reading ability did not match their expectations with regards to completing their assignments effectively. The results of the interviews were analysed and coded in relation to the lack of reading learning skills. The major problems were identified as follows:

1. Their students lacked reading skills to cope with authentic English texts or journal articles in their specialist field of study. They could not understand enough of the assigned texts to complete tasks such as projects and class seminars.
2. The learners lacked the reading strategies needed to read effectively. For instance, they could not extract the main ideas of a text. This problem often caused the learners to misinterpret texts or summarise them unsuccessfully.
3. The learners lacked self-directed learning skills. One subject teacher admitted she was asked for help with reading assignments. The learners asked her to teach them how to read journal articles

effectively as they could not do it themselves. As she was not a teacher of English, she could only make suggestions. The teachers felt very sorry for their students and realised how anxious they were about coping with their assignments in English. Almost all of the texts on the latest advances in pharmacy and related fields are in English, even when the writers are Thais or other non-English speakers.

b. Their expectations of TEP 411 236

The results of the interviews were analysed and coded in relation to solutions to the learners' language problems suggested earlier. The subject teachers expected TEP 411 236 to prepare their students to be able to cope with their real functional needs. Their expectations are summarised and presented as follows:

1. They expected the course: TEP 411 236 to enable the learners to develop their English ability, especially reading ability, so that they could become competent readers and independent learners.
2. They wanted the course to concentrate on enabling the learners to read on their own after the course, focusing on reading strategies to help them read effectively rather than relying on translating word by word with a bilingual dictionary.
3. They wanted the course to teach them how to use monolingual dictionaries. They made it clear that the learners often misinterpreted texts due to the limitations of their vocabulary as well as their lack of reading strategies for dealing with journal articles.

4. They insisted that students should be prepared to become self-directed learners so that they would be able to cope in their higher years of study.

In sum, they expected the students to be equipped with adequate learning skills and reading strategies in order to develop their own language ability both during and after the course.

c. Their suggestions

The subject teachers knew the learners well because they taught them throughout their studies. Some of them were university graduates who had taken TEP 411 236 themselves. Thus, these solutions were suggested from their own experiences and perceptions. After being analyzed and coded in relation to the learners' language problems, they fell into the following two categories:

1. Methodology

The subject teachers' methodological preferences were for methods that made the class more stimulating and encouraged learner involvement. Their suggestions were:

- 1.) The learners should have an opportunity to negotiate and discuss with the teacher and other students what and how they could learn effectively.
- 2.) The learners should have opportunities to actively participate in the learning process so that they experience learning directly in order to do so independently later. The teachers believed that if the teaching and learning were more inspiring, the learners would get more involved in the

learning process. As a result, their attitudes to, and motivation for learning English might be improved.

- 3.) They suggested using various modes of teaching, including visual and audio visual aids.
- 4.) More importantly, they expected the students to be prepared to become independent and better readers. The methodology should allow them to acquire necessary reading skills by encouraging them to exercise their own judgement. The subject teachers consistently advocated a methodology that emphasized the development rather than the testing of their skills.

2. Materials

Some of the subject teachers showed the researcher students' projects requiring them to read almost all of their references in English, and a sample test that involved reading a whole journal article in English. One teacher suggested that the results of the test reflected the fact that the students' reading skills were so poor that they could not gather the main ideas or correct conclusion of a text. She accepted that the test was difficult, but emphasised that it was required for the course.

In short, they wanted the materials to be used in the course to be similar or the same as those the students needed to use in their real situation. They should come from a variety of authentic sources with the latest and the most relevant information to suit the learners' interests and needs in both their studies and professionally. However, each type of material must be introduced step by step if they were not to be too difficult to learn.

In conclusion, it was clear that both the situational needs analyses, through both questionnaires and interviews, had revealed many useful perspectives on learner's needs, wants and lacks or problems. These were taken into consideration in designing the course in the planning, implementation and evaluation stages.

4.1.1.3 Result of group discussion before the course

One PA method, Daily Schedules (see section 2.2.3), was used as an instrument for subjective needs analysis to raise learners' awareness of how they spent time in their daily activities. It also helped the teacher/researcher to understand their learning and life-styles. This helped the teacher to decide upon the type and number of tasks to suit their time and needs.

This method was used before the course in March 1999 with the three main groups of first year learners. They had just completed their first year and were going to take the target English course: TEP 411 236 at the beginning of June, in the first semester of the second year. Each group consisted of nine learners from each class selected according to their grades -i.e. high, average and low- in the first foundation course. Within this group of nine, there were three sub-groups: 1.) a top set of learners with grades A or B, 2.) a middle set of learners with grade C and 3.) a bottom set of learners with grades D and F. There were twenty- seven learners all together. How these learners were grouped for the Daily Schedules activity is summarised in table 7.

Table 7. Summary of method of grouping learners for Daily Schedules activity

Category	Class 1	Class 2	Class 3
A (top set)	3	3	3
B (middle set)	3	3	3
C (bottom set)	3	3	3

A group representing each class was asked to transfer the timing of their main activities into a pie chart and then discuss in detail with the teacher how they spent their time each day. The results of this analysis are summarised as follows:

Class one:

A group representing class one divided their daily schedules into four main parts. The first part (40%) comprised studying in class. Attending classes five days per week from 8.00 a.m. until 4.00 or 5.00 p.m. occupied most of their time during the day. The second part (40%) was resting or sleeping. The third part (15%) consisted of routine activities such as having meals or washing. Recreational activities such as playing sport, exercising and watching TV were also included. The last part (5%) was allocated to revision of lessons or doing homework; clearly with so little time devoted to this, the concept of independent-study was remote.

Class two:

The division was similar to group one, except that 35% was devoted to rest and 20% was for routine activities.

Class three:

The group that represented class three spent 40% of their time in the classroom. Another 30% was allocated to resting or sleeping and 20 % for daily routine and recreational activities. The rest (10%) was for lesson revision or homework.

The findings from the learners' daily schedules indicated that they did not have much time for activities outside the classroom. The lowest proportion of time was dedicated to homework or revision. Interestingly, group three spent twice as much time on lesson revision or homework as the other two groups. This might have

been because they were aware that they needed to work harder to keep up with other learners in the other two groups who were supposed to be at a higher level.

After the completion of their daily schedules, the teacher took the opportunity to investigate the learners' expectations for the course. She asked them to discuss this in their groups. The results of these semi-structured discussions are summarized below:

Class one:

They still needed the teacher to help them learn on their own particularly at the initial stage but did not expect her to do everything for them. They wanted to have constant feedback; for example, frequent quizzes to motivate them to work harder, though nothing too demanding. They emphasised that they needed a good learning atmosphere with a variety of modes of teaching to motivate them to get more involved in the learning process. They wanted speaking and listening integrated with reading skills. They suggested that assessment be divided about 60:40 between continuous and course based assessment respectively.

Class two:

This group of learners said approximately the same things as group one. They stressed the need to get everything done in class. They still needed the teacher's guidance and support for self-directed learning. Though they preferred to undertake most activities in the classroom with the teacher, they expected the teacher to provide some supplementary materials to study outside of the classroom. They wanted to become involved in the learning process and have more opportunities to express their needs and opinions. They preferred working in small groups where everybody had a chance to contribute to the learning process.

Class three:

This group of learners also still needed the teacher to guide and support them to learn independently. They preferred to spend their time in relaxing types of classroom activities in a good learning atmosphere to motivate them to learn more such as learning English through music videos, movies and songs, but this was not possible in the class contact time.

The findings from the discussions about the learners' expectations for the course indicated that the learners expected the teacher to help them make the best use of their time to facilitate learning under her guidance and support, especially at the beginning of the course.

In sum, the Daily Schedules method was successful because it benefited both teacher and learners. It raised the learners' awareness of time management and helped them consider the amount of work they could reasonably do to learn successfully. The compiling and examining of the daily schedules was also very useful for the teacher because:

a.) She gathered necessary information about the learners' daily activities, which was useful for assigning homework. She realised that there should not be more than two tasks per week because of the tightness of the learner's time table. She also found that the learners had formed their own groups outside of class so that they could help each other to complete tasks. This indicated that they could, if encouraged, manage their own work and set goals for themselves in order to meet their own needs.

b.) She established a good rapport with the learners before the course because this activity was communicative. She had tried to empower the learners by allowing them to get involved in planning and designing the course. They were satisfied and stated that they had never experienced this involvement before. In a similar but PA

view, Jones (1996: 30) states that when applying PRA with local people ‘good techniques, including behavior and attitudes, for carrying out a semi-structured discussion are fundamental to the use of all PRA methods’.

c.) Finally, the idea and process of self-directedness was introduced to the learners. This was considered to be important and needed to be addressed throughout TEP 411 236: the learners’ last English course before studying the language independently.

4.1.1.4 Results of Present Situation Analysis (PSA)

Another type of objective needs analysis is present situation analysis (PSA) (see section 2.1.2.1.2). It is also called deficiency analysis as it is the analysis of learners’ current ability regarding their target language. In other words, it is the assessment of learner’s abilities in the relevant skills.

The International English Language Testing System (IELTS) was chosen as a standard test selected from specimen material for the Academic Reading Module’s updated version of November 1997. The learners had never seen or taken this test before. There were 38 questions with the highest possible score being 38. 127 (87.59 %) out of 145 (100%) learners took the test on a voluntary basis. The results of the test are summarized and presented in table 8.

Table 8. Result of the reading proficiency test in pilot study

Result of the pre test	%
Low scores (between 1 and 12)	21.25 %
Medium scores (between 13 and 25)	73.22 %
High scores (between 26 and 38)	5.51 %
Total	100% (N=127)
Mean	16.87
S.D.	5.21
Minimum score	6
Maximum score	28

The results of the test were disappointing given the assumed intermediate level of the learners. The results indicated the low level of the learners' reading proficiency. Though the majority of the learners (73.22 %) achieved medium scores, only 5.21% had high scores, while 21.25% of the learners had low scores. While the lowest score was 6, the highest score was only 28 out of a possible 38, and the mean was only 16.87. The S.D. was very high at 5.21 indicating that the learners' reading ability varied greatly among the three groups.

It could be argued that this test was de-motivating for learners because many of them found it difficult due to unfamiliarity with the format of the test. Further, they did not put much effort into it as it did not contribute to their grades. Nevertheless, the results can be taken as indicative of poor levels of reading even when these allowances are made. The learners were not informed of the results to avoid making them depressed and were told that the results of the test would be used to prepare materials and tasks to suit their ability.

In spite of the arguments presented above, the results of the test provided four main benefits to the teacher. Firstly, they gave accurate ideas of the learners' actual reading ability, which enabled the teacher to design materials appropriate to them, especially for a mixed ability group of learners. Secondly, they helped the teacher to discover the reading problems that learners had in speed and information-extraction. For example, many of them read slowly, did not understand the texts and could not finish the test in time. Thirdly, the test was useful to the teacher but reassuring the learners of the need to improve their reading skills and their responsibility for their own learning. Lastly, at the end of TEP 411 236, it would be possible to measure improvement by comparing test results. However, there were only fifteen weeks between the two tests, which made significant improvement unlikely.

It could be said that the test was useful in helping the teacher to design the course to suit the learners' needs and their current language ability.

4.1.1.5 Result of strategy analysis

As PA methods were used as the teaching methods, the strategy analysis (see section 2.1.2.4) was based on them. Learning strategies -metacognitive, cognitive and social/affective strategies- underpinned the seven PA methods which involved the learners in planning and monitoring their learning in collaboration with the teachers and fellow learners. For example, in the methods of Transect Walk and Brainstorming: semi-structured discussion and negotiation, the learners were empowered to join the decision making process with regards to materials, learning activities and assessment. This method entailed several other learning activities such as 'Reading for fun' (see section 4.2 and 5.2) and presenting journal articles (see section 5.2), which allowed learners to fully employ metacognitive, cognitive and social/affective strategies. The other PA methods such as Cause and Effects Diagram and Well-Being Ranking also emphasised opportunities for exercising these main types of learning strategies through learner empowerment within the iterative and ongoing process. The results of the strategy analysis were revealed in the narrative of the implementation of PA methods (see sections 4.2 and 5.2).

4.1.1.6 Result of Means Analysis

Three fundamental contextual factors (organisational factors, material factors and participants) of the target situation which are assumed to influence the implementation of PA methods were selected for means analysis based on the teacher/ researcher's experiences in teaching TEP 411 236 in the target situation. They were used cooperatively and constructively in designing the course.

4.1.1.6.1 Organisational factors

Organisational factors (see section 2.1.2.5.1) emphasise how the role and responsibilities of the teacher/researcher were affected by the administrators in the university. The university system gives some degree of freedom to each department to design its course based on the university's broadly predetermined objectives. The head of each department also gives a degree of self-determination to teachers who are responsible for certain courses in terms of choice of teaching methods, materials, and assessments but retaining the objectives pre-determined by the department for foundation courses or by the faculty for ESP courses.

The teacher/researcher is one of the teaching staff in the Department of Foreign Languages who was responsible for TEP 411 236 about five years before taking study leave. She designed the course and materials based on the objectives pre-set by the Faculty of Pharmaceutical Sciences based on the university's predetermined objectives. However, she had a comparatively high degree of freedom in making pedagogical decisions regarding materials and assessment with respect to the definition of learning goals. Thus, the scope of the negotiation between her and the learners concerning learning content is moderately wide, entailing a relatively broad scope for classroom innovation. She could initiate and implement change in the course as long as it was in accordance with the objectives of the university and ethical considerations (see section 3.3.3).

4. 1.1.6.2 Material factors

Material factors are: a) class size, b) self-access learning centres and language laboratories, c) materials and d) resources for teacher training and development.

1. Class size

Due to the university's policy of cost effectiveness, the classes were large, with approximately 45 to 50 learners in each of the three classes of TEP 411 23. As this research project promoted collaboration between the teacher and learners as well as among the learners themselves, the use of pair and small group work arose as a result of the ongoing learner-based needs analysis.

2. Self-access learning centres and language computer laboratories

Three main resources are libraries, self-access language centres and language labs or computer laboratories. The university provides both a central library and specialist libraries in the faculties of Pharmaceutical Sciences, Medicine and Nursing, to which the target learners have easy access. Plenty of printed materials in English are available in the form of texts, journals, magazines or English daily newspapers such as the Bangkok Post or the Nation.

The Department of Foreign Languages provides two self-access centres and language laboratories with computers. They are mainly used to support the courses offered in the department, and learners taking the two foundation courses in the first year used the self-access language centres as a course requirement. Departmental research was carried out by Karnphanit, Jaiboon, Poonpon, Chaiboonruang, Senchantichai and Obyam (1999) into English reading achievement through self-directed learning using these Self-Access Learning Centres. The subjects were 837 first year learners from the Faculties of Arts, Education, Management Sciences, Architecture and Humanities and Social Sciences. They were taking the second English foundation course: English for Humanities and Social Sciences II, in the 1998 academic year which required them to read SRA (Reading Laboratory Developmental 2) and RFU (Reading for Understanding Kit 2) materials in these Self-Access

Learning Centres as a self-directed learning task. The results of the pre/post test showed a significant increase in learners' reading achievement in all faculties. The findings concluded that SRA and RFU helped to develop reading skills and that using the Self-Access Learning Centres helped develop self-directed learning.

However, it could be argued that this learning activity was not genuine self-directed learning because the materials were pre-set by the researcher rather than chosen by the learners themselves. The learners were not involved in decision-making or trained to become self-directed learners. The researchers themselves suggested that learners should be prepared or trained to use the self-access learning centres in order to develop self-directed learning effectively.

The department also supplies two computer laboratories for language practice. Generally, laboratory tasks were prescribed by departmental syllabus. The university also makes computer rooms, including the main university computer centre, available to students in each faculty. It was clear that the learners could easily access the necessary resources and materials. The most important issue was encouraging them to make the best use of these.

3. *Materials*

The materials for each English course are chosen by the teacher or group of teachers who teach that course. They come in two main types: commercial English texts and teacher-produced materials. In the Department of Foreign Languages, commercial textbooks are used for the first two foundation courses but for most ESP courses such as TEP 411 236, the teachers produce their own materials to suit their specific and local needs.

4. Resources for teacher training and development

The department of Foreign Languages provides a forum within which teachers can learn from one another. The university has tried to promote teachers' academic development through in-service training courses and scholarships for further study both in the country and abroad. However, teachers in the department of Foreign Languages claim to have too many teaching hours (approximately fifteen per week) to undertake training courses or research. The findings of this research project led to the recommendation that this problem be solved through collaborative action research among colleagues who teach the same course or have similar interests (see section 6.3).

4.1.1.6.3 Participants

Participants in means analysis are those people who are directly or indirectly involved in the innovation such as political bodies and educational authorities (see section 2.1.2.5). This research study focused on a major group of participants and its policies and expectations. That is the university's expectations for TEP 411 236.

The university's expectations for TEP 411 236 are reflected in the objectives preset by the Faculty of Pharmaceutical Sciences based on university policy (see Appendix 4., part A). From the findings of the needs analyses, the teacher/researcher considered that the course objectives were rather too ambitious to given the limited time and learners' ability, especially as regards writing. The preset objectives of the existing course needed to be adjusted to make them realistic and achievable while keeping them in conformity with the university requirements (see Appendix 4, part B). The other main factor affecting learners' attitudes to and expectations for their language course is the classroom culture.

4. 1.1.6.4 Classroom culture

This section will discuss how learners' culturally-based attitudes and expectations might influence their language study.

The hierarchical nature of Thai society sets up teachers as authority figures. Learners expect to be taught by them and respect them as a main source of knowledge. Whilst teachers took an active role and were responsible for all learning, learners were passive and memorised knowledge as in other East Asian cultures (Myers and Sussangkarn 1992). This classroom culture might be resistant to learner-centred teaching, which focuses on empowering the learners to move them toward more self-directed learning.

Data from the interviews before the course showed a coincidence between teachers' and learners' attitudes to English teaching and learning. Both were familiar with the grammar translation method and had fashioned their expectations around it. Most of the teachers had been trained in grammar translation and used it in almost every course in this learning situation. The result was a teacher-centred classroom. This affected learner attitudes and motivation according to the data from the questionnaires and interviews before the course. The learners treated the teacher as responsible for their learning and had no concept of independent study. The lack of emphasis on skills and poor sense of the need to practice outside class meant that they could neither read nor speak the target language proficiently despite many years of studying it. Years of unsatisfactory learning experiences resulted in negative attitudes and low motivation. The motivation for learning was just to pass the exam -with a good grade if possible- rather than the development of language ability. This fact is strongly supported by Hawkey and Nakornchai (1981:72), who pointed out that one characteristic of the Thai classroom situation is the 'firmly entrenched tradition of

teaching towards tests and examinations which directly reflect the contents of the set-books'. Some teachers were motivated to perpetuate this traditional approach because on one level, it worked: most of the learners passed the exams. Therefore, this particular method is practised widely though its effectiveness is often questioned. Perhaps the reason for the failure to replace a methodology that had no proven effectiveness was the way in which it upheld the teacher-centred ethos. This project study was prepared to tackle this problem by emphasizing learners' participatory appraisal in three main stages of course design: planning, implementing and evaluating, involving pedagogical decisions, materials and assessment.

In sum, the objective needs analysis helped the teacher to pre-design instructional content leading to develop exploratory procedures and course design structures to suit the learners' communicative intentions and functional goals.

4.1.2 Course Design

The framework of the course design was based on the pre-course needs analysis described earlier. It was intended to be adjusted to suit the needs of the learners as the course progressed. In order to move the course towards the learner centred model, the initial course design needed to be refined by on- going learner based needs analysis with the collaboration of the teacher and learners as a form of developmental and experiential process. This process occurred in the implementation stage that will be described later (see section 4.2).

The framework or course outline consisted of: 1) course objectives, 2) course structure, 3) course map, 4) methodology and 5) course assessment.

4.1.2.1 Course objectives

The course aimed to help improve learners' reading ability so that they could perform in a target situation involving semi technical and technical texts (see

Appendix 4.1). PA methods were used in the course as an instrument of needs analysis that can respond to the fluidity of the learning situation and help learners achieve the sense of learning independence needed to develop academic reading skills to the level required by the course objectives.

4.1.2.2 Course structure

The structure of the course covers: a) the number of contact hours, b) the number of units, c) texts, d) methodology and e) assessment

a) Number of contact hours

The target course is compulsory for the second year students who had passed both English foundation courses in the first year. The course lasts for one semester of four months or sixteen weeks and contains thirty-two periods (fifty minutes per period) in total, but the actual course contact is fewer than those hours due to the timing fixed by the university and the location of the English class.

Of the three classes, only one class was the first of the day. The others were sandwiched between other lessons and involved the learners' commuting between their department and that of foreign languages. Almost all of them arrived by scooter and had to rush back to attend the next class in their department. Thus, though each period lasted 50 minutes, the learners spent about 5 to 8 minutes driving and walking to the English class on the fourth floor, so the actual class time was reduced to only 30 or 40 minutes. Worse, the learners expected the English teacher to let them go before time. The time constraint factor was the driving force behind moving the learners toward more self-directed learning. It was also taken into consideration in terms of the number of activities and assignments per lesson.

b) Number of units

The number of units is closely related to the number of hours. Although semesters were sixteen weeks long, only fourteen weeks were dedicated to teaching as the other two were for the midterm and final examinations. The first teaching week was spent discussing and negotiating the established course outline, objectives and forms of assessment. Week ten was reserved for a midterm break. Thus, twelve units of reading activities were prepared and one listening unit to serve the learners' immediate need to be exposed to a native speaker. Most of the units consisted of two parallel passages to be completed in one week within two periods. One was intended for use in class and the other was for practising reading through self-directed learning outside the class. The first fifteen minutes were allocated to optional reading practice while waiting for all the learners arrive. During this fifteen minutes, the learners were expected to contribute to the learning process by providing their own choice of material. The materials in each unit ranged from semi-technical to technical English texts, while general health sciences texts were used as supplementary materials for reading for pleasure activities. At the beginning of the course, some of these materials were prepared by the teacher/researcher but later the learners were encouraged to contribute to this activity by choosing their own materials.

c) Texts

As TEP 411 236 is an ESP course, the selection of materials was based on the results of the initial needs analysis as presented earlier in this chapter. Thus, all of the materials were authentic texts from appropriate sources with topics directly related to pharmaceutical studies. They were to be used as 'vehicles for information', not 'linguistic objects' (Johns and Davies 1983, cited in Robinson 1991: 103). Howard and Brown (1997) strongly support the use of locally produced material in ESP stating

that it caters for learners' needs more effectively because it takes local circumstances into consideration. These materials also allowed the learners to rehearse their functional skills for real world communication. Further, Tabtimtong (1994: 131), who studied the problems of translating communicative needs into course design and implementation in a Thai ESP context, advocated locally produced materials. She agreed with Swales (1985: 188) who said that 'there were rarely global solutions for local problems- particularly in ESP course design'. The materials themselves needed to be updated to keep up with new advances. Waters (1994: 10) states that ESP course design 'by its nature is often much more of an on-going process than a one-off product'. Thus, the materials are bound to be adjusted to the on-going needs analysis as appropriate.

There was no content grading between each unit but each of them was a self-contained unit. The learners were assumed to have enough background knowledge of grammatical structures to deal with the selected materials. However, a system of task grading and sequencing was produced through discussion and negotiation between the teacher and learners. The detail of the structure of the course was transferred into the course map (see appendix 4.).

d) Methodology

With respect to the broad concept of method in learner centredness (see section 2.3. 5), a variety of methods, e.g. task or content based or even translation methods, is feasible in certain circumstances in order to make the teaching more responsive to learners' needs. Thus, there is no definitive pre-set formula to follow but rather a framework based on the ongoing learner based needs analysis aiming to help the learners achieve greater independence. The choice of methodology involved the

roles of the teacher and the learners, classroom management, activities and assessment.

The teacher took the role of facilitator and responded to the needs of the learners. She tried to do as Crabbe (1994) suggested for the role of ESP teacher. That is, she put effort into assisting and enhancing the learner's process of understanding their communication problems and addressing their learning problems. She ensured that learners gradually took responsibility for understanding and seeking solutions to the various learning sub-problems identified. This required a management of a learning paradigm that rejected the separation of teaching from learning.

In this study, the teacher also played an active role as a participant in the learning process in order to observe directly the dynamic and complex interaction amongst the teacher and learners during the learning process. In order ensure greater active learner involvement in a successful learning process, the teacher's role needed to be not only creative and innovative but also one that enabled her to be on good terms with the learners in order to exchange information with a high degree of mutual trust.

The learners were expected to take an active role as participants and contributors who were responsible for their own learning success. Their direct and dynamic commitment to their learning brought about learner empowerment, focusing on decision making as well as discussion and negotiation with the teacher. It is believed that 'we learn better when we are in charge of our own learning [and that the resultant learning] is more meaningful, more persistent [and] more focused on the processes and schemata of the individual' (Crabbe 1993: 143-144). The learners in this study were not totally in charge of their learning, especially at the beginning of the course, but they were encouraged to take part in identifying and addressing their

real needs. In other words, the learners were prepared and encouraged to take some responsibility for their own learning by raising their awareness of their own needs throughout the course. Thus, the learner's role was as creative and innovative as the teacher's.

The classroom management or organization used a variety of learning activities such as pair work, group work and whole class methods evolving from the need to stimulate more active involvement in the learning process. The ultimate goal was to move them towards self-directed learning.

As learner empowerment underpinned the methodology used in the study, class learning activities and tasks were the outcome of discussion between the teacher and learners based on the needs of the learners. The activities and tasks were intended to develop both the learners' reading skills and self-directed learning. Ur (1996: 146) suggested dynamically involving learners in the reading process by asking them to 'produce their own texts, create their own questions, summarise the text and re-present the content of the text'. In this research project the learners were encouraged to choose their own texts, and sometimes create questions, summaries or re-presentations. Such learning activities addressed the learner's needs and encouraged active involvement. The activities also involved the learners' comprehension through problem solving in authentic text related tasks such as case studies, project work and oral presentations, stimulating both cognitive and social interaction among learners.

e) Assessment

TEP 411 236 is accredited with two grades point average (GPA) credits. The department requests that the method of assessment and pre-set course objectives are stated at the beginning of the course. However, the assessment could be adjusted according to the result of discussion and negotiation between the teacher and learners.

In the pilot study, the teacher/researcher and learners discussed the assessment at the beginning of the course, and the result of the negotiation was partition of the assessment into three parts: 20% for performance in tasks during the course and 40% for each of the mid-term and final exams.

Peer and self-assessment was intended to be introduced through the discussion and negotiation between the teacher and learners during the implementation phase. This was aimed to promote learner empowerment in order to move learners towards more self-directedness within the limits discussed previously.

4.2 Data presentation in phase two: implementation

This section presents the changes arising from the learners' subjective needs analysis (see section 2.1.2.2) and actual events in the classroom. It is the narrative of an ongoing process of learner based needs analysis with the implementation of PA methods reflecting the joint exploration of learning options and the negotiation between teacher and learners of methodology and mode of study.

Although the adapted PA methods aimed mainly to help the learners to discover their subjective needs, some of them, for example, a version of the Transect Walk also raised their awareness of their objective needs. The narrative of the implementation of PA methods consists of three main cyclical and flexible phases of action research such as planning, implementation and evaluation. These phases may take place simultaneously throughout the process of action research. For instance, during the process of implementation, planning occurs to serve the learners' changing needs and within each phase there is evaluation in order to continue planning and implementing as an on-going process (Nunan 1988). The influences of the three

phases on one another and their concurrence were reflected in the way in which each PA method was used as an instrument for ongoing learner based needs analysis.

The data collected from the following five main sources provide a full perspective of the implementation of PA methods in the study:

- a.) field notes from a classroom participant observation by the teacher/researcher,
- b.) feedback from the ongoing learner based needs analysis/course evaluation forms,
- c.) semi-structured interviews and conversations with the learners both inside and outside the class during the course
- d.) video tape recording of some lessons during the course
- e.) audio tape recording of all lessons during the course

The events from the action research will be chronologically presented to show the developments of the teaching and learning with PA techniques sequentially.

The first month

◦ *Learners and location*

The implementation of PA techniques took place in three ESP classrooms in the Faculty of Humanities and Social Sciences. Khon Kaen university is located in Khon Kaen province in the North East of Thailand, where the learner has little contextual opportunity for practising English outside the classroom, as it is not a tourist area like Bangkok, Chiang Mai and Phuket.

Although some of the learners in each class had met the teacher before the course in the Daily Schedules activity (see section 4.1.1.7), most of the students

met her for the first time in the first lesson. Each class consisted of 45 to 50 learners in their twenties, who were active and lively when being asked about their future plans but some of whom looked anxious, perhaps from the knowledge that the teacher was conducting some research on their classes. The teacher took this opportunity to clearly explain her research and assured them that they did not risk failing the exams as this course was to be treated as any other course. She explained that the purpose of using new methods of teaching and learning was to help them learn effectively and independently. The teacher used English more than Thai with a specific purpose to give them an opportunity to practice both listening and speaking skills. She used Thai only when she found out they could not understand what she meant to say in English.

Since the teacher had taught this course before, she understood their fear. Some were worried that they would fail the exam due to what their friends had told them of the methods the teacher was going to use. Discussing and negotiating with the teacher was new to them. Their real motivation for learning English was to pass the exam, and this was at the front of the teacher's mind whilst planning to help the learners be successful in their language learning.

- ***Course introduction and familiarization***

The first lesson was an introduction to the course. After the teacher/ researcher introduced herself to the learners, she got them to ask her some questions about herself in relation to the course. This was intended not only to establish good rapport with the learners but also to introduce them to the idea of active participation, since most of them seemed to be predisposed to be introverted learners (Eysenck 1965) whose learning behaviours were quiet reserved and distant. They neither liked nor dared risk making mistakes in class. However, it was interesting to see them help each

other to try to ask some questions in English. Next, they introduced themselves to the teacher. They had been classmates since their first year so there was no need to introduce them to each other. Before providing them with the course outline, the teacher asked mainly in English but the learners used both Thai and English: *'Why are you taking this course?'* A semi-structured discussion began, with brainstorming for answers. She took this opportunity to discuss attitudes towards the course. Three main categories of answer were given: 1.) *'It is a compulsory course'* 2.) *'I need to use it for my study and my profession'* and 3.) *'I want to improve my English'*.

The teacher then provided the course outline and asked the learners to consider how the course objectives met their expectations. One of their comments, which summarises the learners' needs and wants, was:

'Reading is important but we would like to improve speaking and listening skills more because we cannot do that even though we have been studying English for many consecutive years'.

This comment indicated that the learners' needs were not in accordance with their wants. The teacher told them that the course objectives were pre-set by the university but that there was an alternative to help them do what they wanted. The teacher explained again that the general objective of the course was to help them improve their reading ability and become more self-directed learners through their active involvement in the learning process. This led to the introduction of a course evaluation that also allowed the learners to express their needs and evaluate the course. The teacher showed them the forms for lesson evaluation and explained how they should be filled in. There were two forms to help them achieve this aim: a lesson evaluation form (two forms per week) and the weekly evaluation form. The teacher realised that the learners were reluctant to express their needs or opinions in class for fear that it would affect their grades. There might have been cultural

hesitation with regards to criticism of seniors such as parents or teachers, but she reassured them that their comments would be dealt with in confidence. They were also given the option of keeping their forms anonymous. The learners accepted the idea that communicating with the teacher about their immediate needs throughout the course would be beneficial.

The feedback from the ongoing needs analysis/course evaluation was used to allow the learners to discuss their needs and to consider how they would be suitably addressed.

The teacher then raised with the learners how she could modify the lesson objectives to suit their practical needs and wants. She asked them how they were going to improve their speaking and listening skills without sufficient exposure to the language. Semi-structured discussion revealed the importance of the following:

- a.* The need to set their own realistic/ achievable short- term goals in order to realise the larger pre-set course objectives.
- b.* The need to improve reading ability.
- c.* The need to improve self-directed learning.
- d.* English as the medium of instruction with the teacher speaking at normal speed but providing clarification on demand.

• ***Planning to solve problems together***

Then there was discussion and negotiation about grouping, time management and assessment. The results were:

- a.* The learners preferred to work in small groups and having formed their own groups outside class, should choose their own groups in class. There were about ten groups of five in each class and ten groups seemed to be the largest number the teacher could handle.

Surprisingly, learners in class three could not reach an agreement on the composition of their groups without the teachers' help. This may have indicated that some learners needed time to adjust to making their own learning decisions, or that they found social choices difficult.

b. The teacher had proposed in the TEP 411 236 course outline that the learners should not be more than 15 minutes late. Lateness for two consecutive periods would be considered as absence for one period. This was intended to encourage learners to arrive on time, as the university required that each learner attend at least 80% of lessons in order to take the final examination. The difficulties the learners had in commuting from their previous lesson have already been described. The learners negotiated with the teacher to finish teaching 5 minutes before the end of the period so that they could reach their next class punctually. The teacher made this conditional on their prompt arrival. The result was a class attendance sheet to be signed by each group and returned fifteen minutes after the beginning of the lesson. This was one way to utilise peer pressure in order to create more effective working. However, this meant that the actual class teaching time was 30 minutes, as the first fifteen minutes were optional to allow latecomers to arrive. These fifteen minutes were used for reading for pleasure.

c. The learners and the teacher discussed their preferred types of assessment. Learners' experience of assessment was not positive and they openly argued that exam grades could not reflect their' real language levels. Some exams used texts taught in class which seemed to test memory or vocabulary and grammatical rules rather than reading ability. If they had to read a new text in an exam, they found it very difficult because they were not properly prepared to read texts independently. Thus, they expected to be well prepared to read effectively and independently. They

suggested frequent assessment of their performance in terms of quizzes or presentations during the course rather than the midterm or final exams only, and the use of self-assessment and peer assessment. This meant that the teacher would put more emphasis on facilitating learners to improve their performance but less emphasis on testing.

◦ *Getting to know learners’ language learning problems*

The teacher asked what their main cause of difficulty in English learning was. Here *the Cause and Effect PA diagram* (see section 2.2.3) was introduced. The learners worked in small groups to prepare a table indicating the main causes of their problems in learning English and suggested solutions for each cause. This method was used to explore the learners’ problems in language learning in terms of their own perceptions. They were also asked to identify the causes of their difficulties and the effect on their attitudes, motivation and progress. Each group presented their ideas in the form of a table under four main language skills within these four categories: problems, causes, effects and proposed solutions. The findings were similar for each group and are summarised in table 9.

Table 9. Summary of the results of method of Cause and Effect diagram

Problems	Causes	Effects	Solutions
Main problems were a low level of ability in all four language skills	Fundamental causes were from inadequate training or practice in using the language skills properly.	Major effects were developing negative attitudes to and motivation for learning English due to previous unsuccessful learning experiences.	Key suggested solutions were getting direct involvement in the learning process with the guidance and support from the teacher first to be able to do it on their own later.

These results showed that the learners understood the nature of their problems and needed to be helped to solve them. They agreed to use English as the medium of instruction but thought this should be introduced gradually to help them improve their speaking and listening skills in particular.

In summary, the learners were not confident of their language ability. They wanted to be well-prepared and well-equipped with necessary learning skills in order to improve it both during and after the course. They particularly stated that they did not like reading due to their lack of success. This was the same vicious circle of the weak reader illustrated by Nuttall (1996: 127): ‘doesn’t understand → reads slowly → doesn’t enjoy reading → doesn’t read’.

The results of this semi-structured discussion led to agreement as to one of the reading activities, reading for pleasure. The learners and the teacher discussed how to improve reading skills and increase enjoyment of reading. The discussion resulted in the decision to dedicate the fifteen minutes before the actual lesson to reading for pleasure. This activity was simply called ‘Reading for Fun’ and was intended not only for reading practice but also to provide an opportunity for the learners to experience a sense of success in reading to motivate them to read more. It was agreed that the teacher and learners should cooperate with one another on this activity, so each agreed to choose their own material according to their interests and ability and then to exchange information about their reading with others in class for the fifteen minutes before the lesson started. The teacher demonstrated how this should be done in the first two lessons, after which the learners provided the texts for this activity.

◦ *Self- perceived language ability*

The second lesson of the first week was also devoted to preparing the learners for the implementation of PA methods by exploring their subjective needs and raising

awareness of their learning needs. The teacher asked the learners how satisfied they felt with their reading ability after finishing one reading for pleasure activity. They were not satisfied and this led to the introduction of another PA method: Well-Being Ranking (see section 2.2.3). The learners were asked to work in small groups to identify the characteristics of good, average and poor language learners and to suggest ways to improve their language ability according to the criteria that they had identified by setting their own goals. They then presented their results to the class. The idea was that they should uncover some of the attributes they needed if they were to become good learners. Thus, they would be helped to deduce the qualities they did not have. The criteria which were most frequently identified by the learners in all three classes are summarised in table 10.

Table 10. Summary of the results of method of Well-being Ranking

Criteria for being good language learners based on their own perception	Criteria for being average language learners based on their own perception	Criteria for being poor language learners based on their own perception
Good learners know how to learn on their own effectively. They grasp every opportunity to improve their language skill. They can communicate successfully in four language skills.	Average learners always take an opportunity to improve their language ability on their own and can do fairly well. They still need the teacher to lead them to become more self-directed learners and better readers. They can communicate fairly well in four language skills.	Poor learners rarely have positive attitudes and enough motivation for learning the language. They cannot learn the language on their own successfully. They need a lot of guidance and support from the teacher to do so. They cannot communicate effectively in any skill.

After presenting their criteria, the learners were asked to measure themselves against their own identified criteria. It was apparent that their self-assessment was modest and nobody classified themselves as good. The teacher used the results to guide them in setting their own goals in order to improve their language ability according to their existing language level. Hence their awareness of their learning needs was raised through their identified criteria for being a good learner.

- *Introducing semi-technical texts*

The first pre-planned material in the form of a semi-technical text was introduced. The first step in teaching reading was the teacher eliciting from the learners background information about the topic of the text and teaching some vocabulary that might otherwise obstruct their understanding at the pre-reading stage. This turned out fine. Most learners tried to answer in English and some in Thai. While they were reading, the teacher showed on the OHP sign- post questions to be answered and provided some support. Each group was assigned to answer some questions based on the text and to present the answers to the whole class. The teacher walked around to monitor and help each group. Some learners showed signs of difficulty in dealing with a task that was not the expected grammar translation. Instead of translating the text as they expected, the teacher helped them to read more by finding the core of a sentence with a complicated structure or guessing the meaning from contextual clues.

The process was slow because the learners were not familiar with this learning method. One short semi-technical text could not be completed within one period, which affected the plan to provide a parallel reading text for the learners to practise reading independently. It was clear that there were many difficulties at this stage. The feedback from class participant observation, conversation with the learners and an

evaluation form revealed that the learners were struggling hard to keep up with the lesson. Some of their comments from the evaluation forms were: 1.) *'Please speak slowly'* 2, *'I cannot understand your questions. That is why I keep quiet'* and 3.) *'This method of teaching and learning is new for me. I cannot understand the lesson'*

◦ ***Response to the learners' feedback***

The teacher responded by speaking at normal speed but giving more clarification and allowing more time for the learners to answer questions. She held to her intention of providing learners with a more realistic communicative environment while keeping them involved in the learning process. She encouraged them to take responsibility by extracting some, albeit limited understanding from her discourse. If they asked her to translate some words, she would guide them to use relevant reading strategies such as guessing the meaning from the context. In this way, the learners began to develop more sophisticated reading strategies and listening comprehension.

This was the first time the learners had read authentic semi-technical texts using a new method of learning, that is, in a more self-directed manner. Despite guidance and the support of the teacher, they seemed to struggle and needed more time to adjust themselves to this way of learning especially with this type of text. The obvious point that they were not ready for this type and level of work was reflected in their feedback from the first month. Some learners commented that: 1.) *'The reading material is very difficult. I don't understand it so I feel bored'* 2.) *'I got lost; I did not know what was going on. I do not like this feeling'* 3.) *'I don't like technical English. It is very difficult to understand'* and 4.) *'I like reading general materials for fun. They are very interesting. I enjoy reading them but not (semi-) technical English'*.

Although the introduction of the semi-technical texts did not work well at this stage, the activity of reading for pleasure proved to be more successful. Some positive comments were given: 1.) *'Reading for Fun is interesting and enjoyable'* 2.) *'The*

materials for 'Reading for Fun' are not difficult. I can understand them well' and 3.) 'I enjoy reading the latest information in 'Reading for Fun' activity'

◦ **Conclusion**

The first month passed with the sense of an experiment where everything was likely to change. The feedback from observation, evaluation forms, semi-structured interviews and conversations with the learners showed how hard the learners struggled to deal with semi-technical texts at the beginning of the course. This may have been due to their limited reading ability and background knowledge of the relevant specialist field or their attitude to and motivation for learning the language. More importantly, the main factor might have been their difficulty in adjusting to new ways of taking responsibility for their own learning, as some of their comments implied: 1.) *'I have not been able to adjust myself to this new approach. I am still confused. There are so many things to do in class'* 2.) *'I don't like technical English. It is very difficult to understand'* 3.) *'We have to study so many subjects, which are very demanding and difficult. I want to study English without any pressure'* 4.) *'I would like you to be more patient with us. Please give us more time. I promise to put more effort into it'* and 5.) *'Please don't take things seriously. We do understand you had good intention to help us learn. Everything is new for us. The most important thing is not to make it serious. Then things will be better.'*

Three adapted PA methods were implemented in the first month for specific purposes: Brainstorming, Cause and Effect and Well-Being Ranking. The brainstorming would be used frequently throughout the course for solving unexpected problems in the teaching and learning process. 'Reading for Fun' worked well but the introduction of the semi-technical reading materials was not as successful as hoped for. The learners needed to find a solution through discussion and negotiation.

The second month

◦ *Adjusting the plan*

A considerable amount of discussion and negotiation with the learners took place. The problem was that the plan to start with semi-technical texts leading to technical ones whilst using general health sciences materials as supplementary, was not appropriate at this stage due to time constraints and the pre-set course objectives. The teacher began to introduce general health science texts for a few reading lessons. This was intended to prepare the learners to read semi-technical and technical texts through practising more reading strategies so that they could have some sense of achievement in reading. This process was expected to encourage confidence in reading to facilitate taking responsibility for their own learning, thus leading them toward more self-directed learning step by step. The semi-technical and technical texts would be reintroduced when they were more ready to cope with them.

◦ *Negotiated syllabus*

It was important to make sure the learners and the authority understood the reason for the many changes to the course. The expected approach was to have the teacher and the learners negotiating with each other as to how to adjust lessons to suit the learners' real needs in each particular situation. However, some learners who were not familiar with this approach and expected conformity to a pre-set syllabus felt confused or frustrated, whilst others felt that the teacher was disorganised or pedagogically unsystematic.

◦ *Be more responsive to the learners' needs*

To solve this problem and hopefully to prevent further misunderstandings and resentments, other PA methods were used based on the learners' feedback. The teacher again used brainstorming within semi-structured discussion to elicit what they

thought was the best way to help them read better on their own. They all agreed that they needed to practise reading more. They wanted the teacher to focus on how to apply different reading strategies to different types of authentic texts, but this could happen only if supported by a positive learning atmosphere.

The teacher elicited from the learners their opinions as to how to create a better atmosphere in the classroom. They believed that the teacher should lower her expectations as to how ready the learners were to cooperate in the learning process.

- *Attitude change*

The teacher agreed to respond more to the learners' needs. She provided more guidance or support to the more hesitant learners rather than insisting they follow the instructions. She also paid more attention to them by exchanging information during pair or group work. She sometimes provided them with materials if they failed to provide their own as they were expected to do. This technique worked well, as all of them later brought their own texts for this activity.

The learners began to understand the teacher's sympathetic attitude and good intentions and their attitude to learning changed positively. They cooperated more, putting greater effort into their tasks. They started to arrive on time, prepare their own materials, join activities and complete assignments as required. More importantly, they showed satisfaction in their active involvement in the learning process.

Implementing selected PA methods had helped the learners to cope with the process of change. They showed signs of progress through planning their own learning, e.g. setting their own learning goals. Many ways to help them do so were used successfully, including greater use of praise and encouragement. The learners benefited from the constantly evolving course.

- *Raising awareness of the needs for technical texts*

The introduction of another PA method: the adapted Transect Walk, arose from the sense that there was a hidden agenda behind the problematic reception of semi- technical texts. In this interpretation, the Transect Walk was a wider exploitation of the learning and target situation environment by the learners themselves, the teacher introduced the notion of interviewing other learners who had already taken the course. The teacher assigned each group to interview seniors in the third, fourth and fifth years as well as some pharmacists who were former students working in the university hospital. This was intended to raise awareness of their target situation and learning needs, for both academic and professional purposes. They were provided with semi-structured interview questions to ask the interviewee with regards to what they needed to read in English for their study or work, problems they had encountered and how these had been solved. The learners presented their results in groups. The summary of the results is in Table 11.

Table 11. Summary of the results of method of Transect Walk

Groups of interviewees	What they most needed to read.	The problems they experienced	Their suggested solutions
Third year learners	Semi-technical and technical text type	Difficulty in fully understanding the texts	Practise reading more focusing on authentic semi-technical and technical texts materials
Fourth year learners	Technical text type	- Difficulty in completing the assignments that mostly required English reading	Practise reading strategies more on reading for main ideas and summarising authentic technical texts. Learn to use necessary reading strategies such as reading for gist and for specific information
Fifth year Learners	Technical text type	- Difficulty in understanding and summarising texts	Practise reading more focusing on reading strategies for summary and presenting the texts
Pharmacists	Technical text type	- Difficulty in understanding the texts especially in summarising them	Practise reading more on technical texts especially with the reading strategies for main ideas and summarising

The learners discovered that most of their seniors mostly needed to read semi-technical and technical texts which they struggled hard to read and understand because they did not know how to read them effectively on their own. The interviewees suggested they avoid this predicament by practicing more and focussing on the authentic semi-technical or technical text types that were relevant to their target needs.

This process helped raise the learners' awareness of their target situation needs with regards to text types and their learning needs in terms of reading strategies. This helped the learners realise that they needed to put more effort into learning the language by actively involving themselves in the learning process and preparing to

read a variety of text types. However, the teacher also responded to their needs for better preparation before the semi-technical and technical texts were reintroduced. Semi-technical reading materials were replaced with general health sciences texts, which were initially intended to be used as supplementary classroom reading because they were easier, shorter in length, had fewer technical terms and less complicated grammatical structures and a greater variety of topics. They were more readable and interesting.

Many of the interviewees in this activity were not able to achieve the goals that the current learners were able to elicit from the interviews, having not been given an opportunity to do so during the course. This finding was confirmed anecdotally by the teacher herself in a conversation with one of the fourth year learners, who claimed that:

'We sometimes had to pay for translation when we could not do it ourselves or when we needed to meet a deadline. It took such a long time to understand the whole article. Though we tried our best, we could not understand some of them well enough to do our assignments. If only the course had prepared us for this.'

This again showed that many learners struggled hard after the course as they misunderstood reading as translation using an English -Thai dictionary.

- ***Dealing with misunderstanding***

In order to counteract this construal of reading as translating and to further raise awareness of learning needs, the teacher took this opportunity to use another PA method: Matrix scoring of priorities (see section 2.2.3). It was adapted to prioritize reading strategies that would help them improve their reading skills. The learners were asked to identify which types of materials, activities and strategies they preferred. Each group of learners were asked to create a matrix scoring ranging from 0

to 9 focusing for presentation in class. The results of this activity are summarized in table 12.

Table 12. Summary of the results of method of Matrix scores of priorities

Top priorities of reading materials	Top priorities of reading activities	Top priorities of reading strategies
-Easy to difficult and shorter to longer texts -General health science to semi-technical and then technical texts	-Reading for pleasure -Reading for comprehension -Reading for presentation of the content of the text (These should be done through group work for more interaction.)	-Guessing unknown words from contextual clues -Identifying cores of complicated sentence structures -Reading for main ideas, specific information and conclusion

The findings showed that the learners preferred to start with what they could handle well at each stage of reading development, i.e. that each material, activity or strategy introduced should be gradually replaced with longer or more difficult ones. They wanted to start with short and easy materials, i.e. the general health sciences text type, before moving to semi-technical and technical texts so that they could enjoy reading at the same time as practising reading skills. They preferred activities requiring interaction with others to motivate them to get involved more in the learning process. This activity also assisted them in realising that reading is not translating.

• *Modifying objectives*

The teacher introduced general health sciences texts as the learners demanded, and as discussed above. They were satisfied and showed clear signs of progress in their reading. They could read and understand the texts better as they could exchange information of what they had read with their peers with more understanding. They actively participated in the learning process in terms of discussing and negotiating

their needs with the teacher and making decisions about their own learning. They showed signs of becoming more self-directed learners through setting their own goals in terms of the sequence of text types to be learned. After their needs were catered for appropriately, they cooperated better with the teacher and their peers to achieve their own goals. They gave more positive feedback, which reflected their sense of achievement and enjoyment in learning. The comments of some learners from the evaluation forms were: 1.) *'Your materials are very interesting'* 2.) *'You have adjusted yourself and your lessons very quickly. The classroom atmosphere is much improved, thanks to your sense of humour and the funny reading materials you provide'* and 3.) *'I am glad you understand us better and I can understand the lesson more'*.

The feedback had a positive impact on the attitudes and behavior of the teacher. She realised that she needed to be more realistic and practical when trying to move them toward self-directed learning to be able to improve their own reading ability. The findings from the learners' feedback helped her to free herself from the pre-set objectives and find a syllabus that better suited the learners' needs. Parlett and Hamilton (1983: 14, cited in Powell 1996: 61) say that 'in practice, objectives are commonly reordered, redefined, abandoned or forgotten'. Thus, the teacher again modified the course objectives based on the results of discussion and negotiation between her and the learners. The objective was to enable them to read for pleasure before reading for academic purposes. This was achieved by: 1.) replacing semi-technical texts with general health sciences texts before re-introducing the former a few weeks later and 2.) further encouraging the learners to choose their own materials for practising reading for pleasure and to exchange information with the teacher and other learners in the 'Reading for Fun' activity.

◦ *Signs of progress*

For the first few of reading for pleasure activities, many of the materials that the learners chose were not appropriate for learners of university level. Some were too short or far too easy. However, the teacher accepted their selected materials whilst suggesting that they increase the level of difficulty if possible. She expressed her appreciation for their efforts in order to motivate them to continue to become more actively involved in the learning process. At the beginning, some learners complained that they could not obtain the materials they wanted. She then adapted another *PA method: Mapping* (see section 2.2.3) to show them how to make the best use of the existing local resources available to them and to investigate how these were currently used. This method was also intended to help them access local resources to facilitate self-directed learning.

The learners worked in groups to draw a map or diagram of all the resources available to them. They then classified the resources from most to least in terms of frequency of use, as summarised in diagram 1.

Diagram 1. Local resources for reading materials

The university main library → The library of the faculty of Pharmaceutical Sciences → The library of the Faculty of Medicine → The library of the Faculty of Nursing → The university computer centre → The Public library in town → The university book center → The book shop in town

The learners also discussed the activities they performed in each resource locality. This revealed that they most frequently used the libraries in the university to search for information for their assignments or studies in general. This was partly because they had air conditioned rooms so they could escape from the hot weather outside. The learners would buy books or magazines in English only when

absolutely necessary because they were expensive. They usually borrowed from the libraries. They sometimes searched for information on the internet, which they found interesting and motivating. This mapping process raised their awareness of their learning needs and showed how many resources they could use to facilitate development of self-directed learning.

The progress of their self-directed learning was clearly seen in the 'Reading for Fun' activity. The longer the course progressed, the better learners knew how to choose the most useful and interesting materials to exchange with others. The materials were selected according to length, level of difficulty and interest or relevance, which reflected the development of their reading ability, their confidence and enjoyment in reading.

- ***Reintroducing semi-technical materials***

Semi-technical texts were reintroduced in the middle of the second month while general health sciences texts were used mainly for reading for pleasure. However, the semi-technical texts were sometimes used in the activity of reading for pleasure depending on what the learners and the teacher chose to share in a particular situation.

The outcome of the actual reading lessons was that the learners were becoming familiar with the new learning process, as they read the texts themselves through practising reading strategies. More importantly, they became more independent; showing less tolerance when the teacher began to dominate, i.e. spent too long explaining or devoting two periods to one text, expressing feelings of frustration at the lack of progress. They wanted to read a new text every lesson, reflecting their need to engage more actively in the process of teaching themselves to read. Their needs were reflected by such comments as: 1.) *'I don't like to read the*

same passage for two periods. I prefer one to be finished in one period. It would be more interesting and challenging to read a new one' and 2.) 'Some work should be done as homework. It is more motivating to read a new text in each lesson'

◦ ***Effects of learners' empowerment***

The reference to homework indicated that the learners had begun to rely on the teacher less. The teacher began to shift the burden of work outside class-time. They began to see class-time as preparation for a larger programme of independent study.

The most fruitful outcome was from the activity of reading for pleasure. The learners had participated well in the learning process. They put more and more effort into developing their reading ability. Their choice of materials improved in terms of content and level of difficulty and became closer to the required outcome.

Conversations with some learners and participant observation demonstrated increased pleasure in this activity. Many of their comments in the evaluation forms supported these findings: 1.) *'My reading ability improves a lot through the reading for fun activity. I enjoy it very much'* and 2.) *'I enjoy reading the latest information and sharing it with others. I have learned more vocabulary.'*

◦ ***Self-directed learning development***

The most promising progress was demonstrated by suggestions with regards to how to assess the activity of reading for pleasure in order to motivate them to involve themselves more in the learning process. They wanted to be continually assessed rather than presented with a few texts in an exam. The learners felt that there should be rewards for their efforts. They suggested that: 1.) there should be a vote for the most interesting piece of reading materials and 2.) there should be peer assessment in terms of scoring each others' reading materials ranging from 0 for uninteresting

materials to 9 for the most interesting materials. This should form part of the course assessment, i.e. the midterm and the final examinations.

The teacher took this opportunity to introduce a self-assessment form using the same criteria as the peer-assessment, after providing a text for assessment. The rating scale ranged from 0 for not understanding at all to 9 for fully understanding the text. Thus, the learners undertook two types of assessment in this activity, i.e. peer and self assessments. After the learners' needs were suitably served, feedback from various sources demonstrated their satisfaction with their active involvement in the learning process. Some comments were: 1.) *'I feel more confident in reading English and I enjoy reading more'* 2.) *'I know how to read much better. I am beginning to like reading in English'* and 3.) *'I am not scared to read in English after reading various types of materials within a short time'*.

• ***Genuine participatory appraisal***

The learners also suggested another way to assess the 'Reading for Fun' activity, requiring the learners to prove that they had actually read the texts by producing summaries. This technique not only demonstrated the readers' effort, but also helped them to practise summarizing texts either in English or Thai. Many learners chose to write in English so that the teacher could help correct mistakes. The learners' active involvement in the choice of assessment showed the success of the reading for pleasure activity. They enjoyed reading more and so read more, creating a virtuous circle of practice and improvement: 'enjoys reading → reads faster → reads more → understands better' Nuttall (1996:127). They became more perceptive in their choice of materials and set their own goal in a genuine participatory appraisal of the learning process by assessing their own needs at each stage.

Their self-directed development resulted in reading improvement via the pleasure they took in reading according to the results of the quizzes during the course.

As one learner wrote: *'Reading for fun with written summaries and self-assessment is challenging and greatly helps me improve my reading and writing. I feel more confident in reading English'.*

The teacher tried to encourage them to exchange information and views on texts they read as much as possible. To ensure this, the name of the student they shared information with had to be written on the piece of work to show that they had cooperated. They voted in their groups on the most interesting materials and the teacher also participated and voted.

• ***More encouragement and support for practising reading***

Learner choices were supplemented with teacher's choices of texts once a week. When learners did this they assessed their own progress on a 0-9 rating scale, both with and without the use of a dictionary. This task was assessed and counted towards the course grade, thus motivating them to read more within a limited time. Semi-technical texts such as medical leaflets and drug labels were gradually reintroduced within this framework. The learners successfully participated in the learning process both in the lesson and in the task undertaken outside the class. Feedback clearly indicated their growing sense of self-satisfaction in their improved reading ability: 1.) *'I enjoy reading more. My English reading ability has improved a lot'* 2.) *'I like reading up to date news and articles and sharing them with others. I have improved my vocabulary and reading skills'* 3.) *'I feel confident in reading English now, something I have never felt before'* and 4.) *'I can see a gradual improvement in myself. I do not look up so many words in the dictionary as in the past. I enjoy reading English more'.*

The signs of resistance and resentment evident at the start of the course had almost totally disappeared by this point. The learners showed a greater sense of independence and positive attitudes to and motivation for reading.

The third month

◦ *Moving toward more authentic semi-technical and technical texts*

At this stage the learners began to deal with texts (authentic target situation texts) in the way they would have to in the future. Their reading skills had improved as demonstrated by a wide range of reading materials chosen for the reading for pleasure activity in terms of relevant content and level of difficulty and different sources such as such as newspapers, magazines, journals and the internet. Evidence from their responsibility in choosing their own reading materials confirmed how well they had adjusted to the new methods of learning and how ready they were to move on to read their target situation texts.

As a result, general health sciences texts were exchanged for semi-technical texts in the actual lessons. The lessons went well with guidance and support diminishing as the course progressed. The learners participated and cooperated well with one another and with the teacher. Some of the learners revealed their approval of the results in a series of comments made in their participatory appraisal:

'You have adjusted your teaching very quickly and it suits our needs well.'

'I like your friendly and supportive methods. The materials are suited to our needs and ability i.e. interesting and readable.'

'It is a democratic way of teaching with plenty of opportunities to express our ideas. The atmosphere is good now.'

'I enjoy reading English more. It is not boring as I had expected.'

'I have gained more knowledge and pleasure from participating in the learning process.'

'I feel more confident in reading English. I enjoy learning more, which is very different from what I felt in the past. I was frustrated and bored at the beginning but I feel more motivated to learn on my own.'

'The techniques of encouraging us to understand our own needs and find our own solutions with freedom for making choices such as assigning us to find our own reading passages, forming a group to present some work and exchanging information and ideas with others makes me become more responsible for my own study.'

'Having opportunities to participate in the learning process makes us more alert to learn. Working in a small group enables me to be more responsible for my own study.'

The learners had become extroverted and more willing to rise to the challenge of meeting their needs on their own terms, through learning by involvement.

- ***Becoming self-reflective learners***

The process of brainstorming, focusing on discussing and negotiating their needs in the ongoing needs analysis/course evaluation, helped learners to become self-reflective. The learners were more aware of their target and learning needs and learned how to address them properly. They started to turn from introverted to extroverted learners. Once they became involved in their own learning processes, they became familiar with and keen on expressing their needs openly and constructively so they could make even better progress. This was not the case for the other teachers who were still dominantly authoritarian figures rather than facilitators. Sometimes the teacher/ the researcher could not balance these two roles due to the limited time frame of the course. Some learners felt under pressure:

'I know you are very dedicated to teaching us. I will try my best but I do not want you to take it too seriously. Changing our attitude and behaviour especially in learning English is not easy and it takes time. However, I think we have gained both knowledge and pleasure from your course though it was

difficult at the beginning. I would like you to tell us how you felt about us as well.'

This feedback also reflects the way in which both parties struggled hard to achieve their goals within the time constraints. As mentioned earlier, English was considered to be less important and had fewer credits than the pharmacy courses to which they devoted more effort. With exams approaching, they remarked on their need to focus on other subjects in comments such as: 1.) *'The exam is approaching but there are many things to do, with many subjects to study. I cannot catch up with all the work. Please reduce the extra reading material to one per week. Please pity us'* and 2.) *'I have to write four reports for different laboratory experiments. I feel pressured to do so many things and sometimes feel stressed. I know it is my own responsibility to improve my English. I will try my best'.*

The teacher responded accordingly, treating this request as a learning need. The number of tasks was reduced. The process created an even more negotiated syllabus that entailed greater learner centredness in terms of more active learner involvement. The teacher had reintroduced semi-technical texts and some technical texts with success. The learners had begun to direct their own learning by the end of the third month.

The fourth month

- ***Progress in reading***

Both the learners and the teacher had by now adjusted themselves fully to the new methods of teaching and learning. By trial and error, levels of attainment in reading were rapidly improving through the practice of reading for pleasure with general health sciences texts with the cooperation between teacher and learners. More importantly, the reintroduction of semi-technical texts had been successfully achieved.

◦ ***Effects of the implementation***

The real effect of the implementation of PA methods was shown in the more active learner involvement in the learning process. Its result was better motivation all a round. Consistent and constant cooperation between the teacher and learners helped the learners became more independent. The benefits of the process are evident in these comments: 1.) *'You have adjusted your teaching very quickly and it suits our needs well'* 2.) *'I like your method. You are friendly and supportive. The materials are suitable for our needs and ability i.e. interesting and readable. It is a democratic way of teaching with plenty of opportunities to express our ideas. The atmosphere is good now'* 3.) *'I enjoy reading English more. It is not boring as I expected'* and 4.) *'I have gained more knowledge and pleasure from participating in the learning process'*.

The benefits of the intervention became clearer to the learners as the course progressed. Other comments bear this out:

'I enjoy learning more which is very different from what I felt in the past. At the beginning of the course, I was frustrated and bored but now I feel more motivated to learn on my own and have more confidence in my reading ability.'

'I have become more responsible for my study through learning to recognise my needs and actively participate in the learning process. I enjoyed interactive learning activities such as finding my own reading materials and forming a group to present our work.'

'The English for fun activity makes me feel more confident in reading English. My reading improved gradually. Now, I do not look up so many words in a dictionary as in the past.'

◦ ***Positive effect of learner empowerment***

The learners had now established their own syllabus and materials and accepted a system for their own ongoing appraisal of the course from which the

course could be redirected. Through learner empowerment, the learners became more actively involved in the learning process, leading to a greater degree of learner centredness. This promoted greater confidence in their ability leading to language improvement. The major factors in this whole process powerfully reinforced each other as presented in Diagram 2.

Diagram 2. Positive effect of learner empowerment

Learner empowerment ⇒ more learner involvement ⇒ more responsibility for own learning ⇒ more confidence in own language ability ⇒ greater independence ⇒ language improvement

◦ *Summary of progress*

Comparing the feedback produced at the beginning of the course with that at the end of the course reveals real changes among the learners, especially with regards to their attitudes to and motivation for learning English. Some examples of feedback from the evaluation forms, semi-structured interviews and conversations with some of the learners are:

(At the beginning of course)

'I have not liked English since I started studying it. It was not interesting. I don't have a good attitude towards it. I only studied it because it was compulsory.'

'My English background knowledge is poor. I find it very difficult to read technical English. I do not like to study like this. I feel frustrated.'

'Though technical English is needed in higher years of study, I am not good at it now. So, I would like to study the easy texts first and then the more difficult texts.'

'I cannot understand the reading material. It is very difficult and full of unknown words.'

'It is better to start with the short, easy but interesting texts and then the difficult ones later.'

'What we did was looking up unknown words in the dictionary and translating them word by word. It was boring because though we knew the meaning of every word we still cannot understand the whole passage or article clearly.'

(At the end of the course)

'Using English as a means of instruction makes a learning atmosphere of real English learning. It motivates me to put more effort into learning it. It is not boring as I had expected. I have gained more knowledge and pleasure from participating in the learning process.'

'The techniques of encouraging us to know our own needs and find our own solutions with freedom to make choices such as assigning us to find our own reading passages, forming a group to present some work and exchanging information and ideas with others makes me become more responsible for my own study.'

'Having opportunities to participate in the learning process makes us more alert to learn. Working in a small group enables me to be more responsible for my own study.'

'The English for fun activity makes me feel more confident in reading English. I can gradually see my own improvement. I do not look up so many words in a dictionary as in the past.'

'I like the way you guide us but not do it for us. This makes me feel more confident to read by myself.'

Hence, the needs of the learners had evolved with their changing learning and reading strategies. This evolution had been tracked and addressed by PA methods. The learning and reading strategies had been modified and re-modified as the needs of the learners became clearer, through learner-based needs analysis using PA methods.

All three research questions now had some indicative answers:

Question one: Do PA methods enhance learner centeredness as the instrument of learner-based needs analysis to raise the learners' awareness of their target situation and learning needs?

The outcome of learner training and learner involvement was the negotiated syllabus and the learners' own material production for their preferred learning activities. The learners became more aware of their target situation and learning needs, as reflected in feedback from each lesson.

Question two: Do PA methods help move the learners towards more self-directedness?

A growing emphasis in the feedback on positive comment and rising input from self-directed tasks revealed how they began to set learning goals and take more responsibility for their own learning through active involvement in the learning process and appraisal.

Question three: Do PA methods help improve learners' reading skills?

The improvement of their reading skills was shown in their reported ability to read a variety of text types of different levels of difficulty, starting from simple general health sciences texts to more difficult semi-technical and then technical texts. More importantly, not only could they read better, they also enjoyed reading and had more confidence in their improved reading skills.

4.3 Data Presentation in phrase three: Evaluation

The implementation was completed at the end of September 1999. The qualitative data were collected from the field notes of classroom participatory observation, video transcription, semi-structured interviews, and ongoing learner-based needs analysis/course evaluation.

There were also the results of the semi-structured interview and quantitative data collected at the end of the course. Three sets of quantitative data were collected from:

- 1.) pre/post test,
- 2.) course evaluation forms distributed by the
teacher/researcher and,

- 3.) the course evaluation forms distributed by the faculty of Humanities and Social Sciences. This is an official course evaluation for all courses taught in the faculty.

These three sets of quantitative data will be discussed and presented after this results of the semi-structured interview at the end of the course which is qualitative.

4.3.1 Results of the semi-structured interview at the end of the course

The teacher/researcher interviewed the learners at the end of the course (see section 3.3.6.1.8) as one type of course evaluation. The questions were intended to find out the effects of the implementation on the learners':

- 1) self-directed learning,
- 2) reading skill improvement,
- 3) attitudes to and motivation for learning English and,
- 4) attitudes toward PA methods.

In summary, the results were as follows:

Forty out of forty-five learners said that they felt more confident in learning to read on their own having been involved in the reading activities involved in the course. They could understand what they read much better and enjoyed reading more. Those who did not agree with this said they had difficulty adjusting themselves to the new method of teaching and learning within the time constraints due to inadequate reading skills and background knowledge. However, they had admitted they had learnt some skills to help themselves read on their own after the course.

All of them accepted that taking TEP 411 236 was useful preparation for independent study after the course. However, thirty of them would have liked a further optional English course.

Thirty-five of them said that they liked the methods used in the course, especially the freedom to take part in decisions regarding materials, activities and assessments. The rest said they needed more guidance and support from the teacher to keep up with the lessons.

The overall result facilitates positive answers to main research questions two and three (see section 3.1.2). The learners felt more confident in learning in a self-directed manner and their reading skills had improved, as discussed above.

4.3.2 Results of the pre/post test in the pilot study

The main purpose of the post- test was to measure whether the learners’ reading ability was improved by the implementation of PA methods. It was the IELTS administered in the last week of the course (see section 4.1.1.4). 127 (87.59 %) out of 145 (100%) learners took both pre and post tests on a voluntary basis. The result of the data analysis is shown in table 13.

Table 13. Result of pre/post test

Result of pre/post test	Means	S.D	No. of subjects	t-test	df
Pre	16.87	5.21	126	8.71**	125
Post	20.54	5.21	126		

The result of the t-test (t = 8.71, 125 df, p<0.001) was significant. It indicated a real improvement in reading skills, which was unexpected given factors such as the low level of the learners’ reading proficiency at the beginning of the course, their difficulties in adjusting themselves to the new methods and the time constraints of the

course. There are perhaps two main reasons for such a huge improvement. Firstly, the learners were from all three classes and of very mixed ability. Secondly, the test was optional. Most of those who took the test were the more able and confident learners.

However, the findings were important because they implied that the effect of the implementation of PA methods on learners’ reading skills was positive and warranted further study: the main study.

4.3.3 Results of summative course evaluation conducted by the teacher

108 learners (77. 14 %.) out of 140 (100%) returned the anonymous questionnaire, preceded by a clear statement that its results had no effect on the course grade. The data were analysed in the forms of the mean and standard deviation as used by the Faculty of Humanities and Social Sciences. The rating scale was from 0 to 6. The results of these findings are presented in Table 14.

Table 14. Results of course evaluation conducted by the teacher

Evaluated aspects	Mean	Standard deviation
<i>1. I like the methods in which the learners’ needs are addressed both before the course and continuously throughout the course.</i>	4.73	.7807
<i>2. I like the methods that allow learners to take part in decision- making in all steps of course design: planning, monitoring and evaluating.</i>	4.74	.7534
<i>3. I like the opportunity to choose materials based on my interest and pace.</i>	5.03	.9218
<i>4. I like the methods that allow me to work with others in pairs and small groups.</i>	4.77	.8604
<i>5. I like the opportunity to contribute to the learning process.</i>	4.78	.7893
<i>6. I appreciate the freedom to choose a partner to work with.</i>	5.15	.8841
<i>7. I like the methods that allow learners to assess one another’s work.</i>	4.44	.9790
<i>8. I like the methods that train learners to be more responsible for their own learning.</i>	4.44	.7774

9. I like the methods that encourage learners to use critical thinking through directly participating in reading lessons.	4.54	.7541
10. I appreciate the methods promote greater learner independence.	4.20	.8621
11. I appreciate the opportunity to practise English as a means of instruction.	4.73	.9821
12. I like the methods that assess real performance from actual participation during the course a part from written midterm and final exams only.	4.70	1.7102
13. I appreciate the opportunity to learn a variety of text types with up to date information and a wide range of activities based on our needs.	5.08	.8552
14. I appreciate the opportunity to learn to read authentic texts based on target needs and learning needs.	4.67	.7854
15. I like the methods that allow learners to evaluate the lessons regularly for ongoing development.	4.61	.8736
16. I appreciate the opportunity to do the learning myself in both an informed and self-directed manner.	4.70	.8118
Total no.= 16	Overall mean = 4.71	Overall S.D.= .8999

Note: The criteria for interpretation of the means were: 5.50 - 6.00: most satisfactory, 4.50 - 5.00: very satisfactory, 3.50 - 4.00: satisfactory, 2.50 - 3.00: unsatisfactory, 1.50 - 2.00: very unsatisfactory, 0.00 - 1.00: least satisfactory.

The overall mean was high at 4.71, with standard deviation at .8999. This indicated that the majority of the learners responded well to PA methods implemented in the pilot study. The three most preferred learning activities with the highest means were items 6, 13 and 15, showing strong appreciation for the empowering nature of the course. Although most of the learners realised the benefits of the implementation, there were some drawbacks which were reflected in these four comments given by learners:

1. One learner was sceptical about the reliability of peer assessment, which they practised during the course (item 7).
2. One learner said that the process of actively taking part in the learning process through different activities was difficult (item 8).

3. One learner stated that there was not enough time for practising self-directed learning to improve reading skills (item10).

4. Another learner commented on the practice of working in pairs or small groups, saying that some learners did not contribute to the group work (item 4)

This could be counted as evidence of their increasing self-directed learning because with Thai culture the negative comments can be seen as positive as they have been taught to be humble not to boast about their ability and not just attributed to the students' sense of an insufficient level of English. In this sense the students were starting to individualise their response to the learning situation as it was uncovered by the PA approach.

Similarly, the learners felt that with greater independence, their reading ability improved. The two factors, thus, reinforced each other in their understanding. This was demonstrated in the approval shown for the activities focusing on developing self-directedness and reading ability.

4.3.4 Results of the summative course evaluation conducted by the Faculty of Humanities and Social Sciences

This section will discuss and present two types of data from the course evaluation forms conducted by the faculty: 1.) the result of the questionnaire, and 2.) the learners' comments on the questionnaires. The questionnaires were distributed to the learners in three classes in the pilot study. The number of respondents in each class were: 42 out of 45 (93.33%) in class one, 39 out of 50 (78%) in class two and 38 out of 45 (84.44%) in class three. There were 119 respondents (85%) out of 140 (100%) in total. 80% of the respondents stated that they attended about 90% of all lessons.

I. The results of the questionnaires for course evaluation.

There were 13 items in the questionnaire about the teacher's performance in during the course. However, items 7 to 13 could be seen to represent the effectiveness of the implementation of PA methods in enhancing learner centeredness through learner empowerment. The discussion of the findings will focus on these specific items. The results of the course evaluation from the three classes are presented in Table 15.

Table 15. Results of the course evaluation conducted by the faculty of Humanities and Social Sciences

Evaluated aspects	Class one		Class two		Class three	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
<i>1.The teacher clearly states the objectives of each lesson before starting teaching.</i>	3.60	0.798	3.72	0.646	3.84	0.638
<i>2.The teacher is always punctual.</i>	3.64	0.878	3.77	0.705	4.08	0.818
<i>3.The teacher is always consistent with the timetable.</i>	4.40	0.664	4.41	0.677	4.55	0.685
<i>4.The teaching apparently proves the teacher has well prepared each lesson.</i>	4.04	0.794	4.05	0.793	4.03	0.716
<i>5.The teacher is capable of teaching in enabling the learners to understand the lesson well.</i>	3.45	0.771	3.36	0.742	3.42	0.826
<i>6.The teacher is available for consultation teacher outside the class.</i>	3.19	0.890	3.70	0.766	3.18	0.982
<i>7.The teaching has covered all the main points stated in the syllabus.</i>	3.60	0.767	3.46	0.775	3.58	0.858

8. <i>The stated objectives have been achieved.</i>	3.69	0.680	3.56	0.640	3.56	0.642
9. <i>The teaching approach promotes learners' creative, critical and analytical thinking process.</i>	4.36	0.576	4.18	0.683	4.47	0.646
10. <i>The teacher provides opportunities for learners to actively participate in the learning process through discussion and negotiation.</i>	4.07	0.777	4.00	0.873	4.29	0.897
11. <i>The teacher has used teaching materials and aids appropriately for the purpose of each lesson.</i>	3.30	0.798	3.45	0.643	3.53	1.00
12. <i>The teacher has employed suitable learning activities for each lesson e.g. using small group work to promote collaborative learning.</i>	4.17	0.762	4.05	0.825	4.24	0.675
13. <i>The teacher has employed appropriate methods of assessment.</i>	3.55	0.771	3.82	0.683	3.66	0.847
Total no.= 13	Overall mean = 3.77	Overall S.D.= 0.763	Overall mean = 3.81	Overall S.D.= 0.727	Overall mean = 3.88	Overall S.D.= 0.786

Note: The criteria for interpretation of the mean were:

4.50 - 5.00 = very good,

3.50 - 4.00 = good,

2.50 - 3.00 = satisfactory,

1.50 - 2.00 = unsatisfactory,

0. 00 - 1.00 = very unsatisfactory

The findings showed the success of the implementation in meeting learners' needs. Learners' strong preferences for the learning activities in items nine to thirteen

in particular implied the positive effect of the intervention in enhancing learner centredness through training and involving the learners in the learning process as a positive answer to research question one.

II. The additional data from the learners' comments in the questionnaire

The other set of data in the questionnaire was in the form of the learners' comments. The data were analysed and put into two categories: 1.) positive points and 2.) negative points. They are summarised in Table 16.

Table 16. Additional information from the learners' comments

Class 1	Positive points	Negative points
	<p>1) 'The teaching methods and the activities are suitable. Though the materials were very difficult at the beginning of the course, the teacher has adjusted them appropriately to suit our needs. However, the exams are very difficult and some seem to be too difficult. They should be adjusted to suit our ability to motivate us to learn more and better.'</p> <p>2) 'The teacher was very devoted and worked very hard to make us understand the lessons. Though it seemed to be very difficult to adjust to the new teaching and learning methods at the beginning, it turned out to be fine later. I accepted that these methods are new to us so that not all of us could accept and adjust themselves to them well enough.'</p>	<p>1) 'The lessons are difficult and there are too many things to learn in a limited time. I cannot finish reading in time.'</p> <p>2) 'The teacher should pay more attention to the learners, not just asking whether they understand or not. It doesn't seem that the teacher has a systematic way of teaching. This is because when the learners do not understand, the teacher changes the ways of teaching immediately.'</p>
Class 2	<p>1) 'I like this teaching method very much. It is fair to be assessed by performance through actual participation in the learning process rather than only by the exams for 2 or 3 hours.'</p> <p>2) 'You have taught us properly. I like the teaching method, that means we are the centre of the teaching and learning. It motivates us to learn more by always actively participating in the learning process.'</p> <p>3) 'Your teaching is good. You have put all of your efforts into making us learn better.'</p> <p>4) 'You are very dedicated to your teaching which helps us learn better.'</p>	<p>Time for learning is too little. We wasted time on commuting so there was not enough time for learning.'</p>
Class 3	<p>You are very dedicated and well prepared to help us improve our language learning. You are friendly with us. In each lesson throughout the course, I could feel how much you devoted to your teaching in order to enable us learn better.'</p>	<p>1) 'I would like to have a systematic way of teaching. I do not like any teaching that keeps changing or is uncertain.'</p> <p>2) 'I sometimes could not understand the texts if they were not being translated. However, some materials are very interesting.'</p> <p>3) 'Some materials are too long for the limited time.'</p>

The positive comments dwelt mainly on learners' satisfaction with the development of their reading ability and the methods used to empower them. The negative comments were mainly related to the time constraints in the course that affected adjustment to the new methods for both the learners and the teacher. Sometimes there was some frustration and misunderstanding with regards to implementing the methods as an ongoing problem-solving process. For instance, one learner argued that the teacher did not have a systematic way of teaching both in terms of materials and methods which had changed throughout the course.

However, it was clear that a distinction needed to be drawn to the students who needed more training between a flexible or variable structure and a lack of structure. For example, if feedback dictated a pedagogical change of direction, the change needed a structured pedagogy with transparent targets and supporting goals' definition. This can be achieved by the teacher performing such basic techniques as writing the day's pedagogical target on the board and outlining these activities that will follow. This type of structure did not preclude a flexible response to the learners' predicament.

The overall results answer the research questions positively, in that PA methods raise the learners awareness of their target situation needs and learning needs. The qualitative results also indicated that the learners' self-directedness had improved as they had learned how to read by themselves better.

4.4 Summary of the pilot study

The pilot study was conducted through action research as a case study with three classes. The findings from both the teacher as researcher and the faculty appraisal were consistent in proving the success of the intervention in the pilot study.

PA methods enhanced learner centeredness as the instrument of learner-based needs analysis to raise the learners' awareness of their target situation and learning needs. The learners were moved towards more self-directedness resulting in the improvement of their reading skills. The major issue that arose from the findings was that PA methods had a positive impact on learners' attitudes to and motivation for learning English as well as attitudes towards self-directed learning. The largely confirmed effectiveness of the pilot study made it an appropriate base for the main study. As three questions in the pilot study did not cover the issues mentioned above, pre/post questionnaires and questionnaires for follow-up studies were added in the main study to examine the influence of the intervention on the learners' attitudes towards language learning and self-directed learning. Moreover, to closely investigate the specific issues mentioned earlier, only one group of learners was chosen in the main study. The adjustments made for the main study will be presented in Chapter Five.

Chapter Five: Main Study

Introduction

This chapter deals with the three main phases of conducting the main study.

The first phase, planning, concerns the reformulation of the main study in the light of the pilot study. The second phase, implementation, relates to the narrative of qualitative data. The third phase, evaluation, presents the results of all the data collected at the end of the course and after the course in relation to the research hypotheses and research questions.

5.1 Phase one: planning

This section describes the reformation of the main study based on the findings of the pilot study.

5.1.1 Reformulation of the main study

The pilot study showed how PA methods could enhance learner centredness. They were used as the instrument of learner based-needs analysis to raise learners' awareness of their target situation and learning needs in ongoing needs analysis during the course. The learner training and involvement occurred within this ongoing learner-based needs analysis. The learners were encouraged to take responsibility for their own learning, which helped move them toward more self-directed learning so that they could improve their own reading skills. Active involvement in the learning process as the result of the promotion of learner empowerment underpinned all selected PA methods, and in return had a positive impact on learners' attitudes to and motivation for language learning and also on their attitudes to self-directed learning.

These main findings of the pilot study led to some adjustments to the main study. Foremost among these were that the implementation of PA methods would be reassessed. The learners' attitudes to and motivation for language learning and their attitudes to self directed learning would be examined during the course and after the course until their third year. This led to the formulation of the research hypotheses and readjusted research questions in the main study (see section 3.2) and the following four main adjustments:

5.1.1.1 Adjustment to the structure of the main study

This section involves adjustment of research purposes, research questions and methods of data collection. The pilot and the main studies are compared in these main aspects.

- a. The purposes:* Both the pilot and the main studies investigated the effect of the implementation of the PA methods in enhancing learner centredness as the instrument of ongoing learner-based needs analysis, to raise learners' awareness of their target situation needs and learning needs. Through this process, training and involvement helped move the learners toward more self-directed learning in order to improve their own language skills especially reading skill. However, The purpose of the main study was to reassess the implementation of PA methods already tried out in the pilot study. It also examined the influence of the intervention on the learners' attitudes towards language learning in general and self-directed learning in particular.
- b. The research questions:* The pilot and main studies both address the three main original research questions i.e. 1. Do PA methods enhance learner centeredness as the instrument of learner-based needs analysis to raise the

learners' awareness of their target situation and learning needs?, 2. Do PA methods help move the learners towards more self-directedness? and 3. Do PA methods help improve learners' reading skills?

However, Six research hypotheses were drawn out of the findings in the pilot study i.e. 1. The implementation of PA methods enhances learner centeredness., 2. The implementation of PA methods has a positive effect on learners' attitudes toward learning English. , 3. The implementation of PA methods has a positive effect on learners' motivation for learning English., 4. The implementation of PA methods has a positive effect on learners' attitudes towards self-directed learning., 5. Learners became more self-directed as a result of the implementation of PA methods and 6. The learners' reading skills improved as a result of the implementation of PA methods. In addition, with respect to these hypotheses, another three research questions were added in the main study i.e.1. Do PA methods help learners improve their attitude towards learning English?, 2. Do PA methods help develop learners' motivation for learning English? and 3. Do PA methods help improve learners' attitude towards self-directed learning?

- c. *The research design:* Both the pilot and main studies used case study as the research design. Nevertheless, the case studies involved in the main and pilot studies did not use the same group of learners. The case in the pilot study was a group of learners spread across three classes taking TEP 411-236 in the first semester of the academic year, 1999- 2000, whilst the main study involved a group of learners in one class taking the course in the first semester of the academic year, 2000-2001.

d. The research methodology: Both pilot and main studies used action research as research methodology. They both used these methods of data collection:

- needs analyses (before the course),
- pre/post test (different versions)
- video-tape recording (for some lessons in the pilot but every lesson in the main study)
- field notes from participant observation
- semi-structured interviews
- a form for ongoing learner-based needs analysis/ lesson evaluation
- a questionnaire/course evaluation form set by the university
- a questionnaire/a course evaluation form set by the teacher

The methods of data collection in the pilot study were mainly for qualitative data. The main study used both qualitative and quantitative data. Different methods of data collection in the main study are: pre/post questionnaires and questionnaires for follow up studies.

5.1.1.2 Adjustment to the pre-course needs analysis

The findings of the pilot study revealed that the second year pharmacy students rarely grasped their target needs before the course, but that they did so during and after the course with the assistance of adapted PA methods. The purpose of PA methods was to reveal students needs to them as part of the teaching and learning process. Therefore pre-course perceptions of needs were not fully significant to the main study.

5.1.1.3 Adjustment to the case study

The main study involved only one group of learners. There were three major reasons for choosing only one class instead of three classes as in the pilot study. Firstly, the class which was Class two which was assumed to be an average class of all three consisting of 40 learners so it was considered to be enough to facilitate thorough investigation of the effects of the implementation of PA methods. Secondly, the teacher/researcher wanted to collaborate with the other two teachers who would teach other two sections of the same level and they were going to teach TEP 411 236 after the main study was completed. This collaboration was expected to help them to manage the course in the future, as one of them was still using the materials prepared for this course by the teacher/researcher before taking study leave. It was hoped that the intervention in class two would set some examples for them to adjust their teaching in their own classes. The collaboration would provide them with an opportunity to become familiar with the materials and methods for dealing with them. Lastly, the most important reason was that collaboration would provide a trial for the individual teacher who wanted to use the methods in his/her own class to verify that they were flexible enough to meet the learners' needs while conforming to the same assessment requirements.

5.1.1.4 Adjustment to the materials

With respect to the case study in the main study mentioned above, the use of core materials was a requirement of the university. That is, the university requires all learners on the same course to use the same core materials and assessments.

The teacher/researcher prepared core materials for the other two teachers who observed the classes in the pilot study. They were encouraged to take part in decision-

making with regards to core materials, quizzes, and the midterm and final examinations.

During the planning stage at the beginning of the course, the teacher/researcher sometimes discussed the course objectives, materials and assessment with these two teachers. This provided a forum for all three teachers to learn from one another in designing a more responsive course for learners. The teacher/ researcher entered into discussions with the other two teachers during the implementation stage in order to get feedback on the use of materials and to help solve any problems that occurred during the course.

Although the teacher/researcher did not have any control over their teaching methods, every teacher needed to cover the three main types of materials decided upon before the course, because this directly affected the learners' assessment. This practice was realistic in the target situation, where many teachers taught the same course to many classes using the same materials. This provided an opportunity for the teacher/researcher to show that there was a better alternative to cater for the learners' needs within such limitations.

The difference between the material used in the pilot and main studies was that the pilot study was intended to commence with semi-technical literature then move on to technical texts, while the main study started with general texts in health science and progressed to semi-technical and technical texts. The materials and activities that would be used were given to the other two classes i.e. classes one and three as a syllabus. However, for the case study, this was treated as pre-set material since it was acknowledged that it might be changed by means of negotiation between the teacher and the learners during the course.

The core materials for all three classes consist of sixteen different units in 3 main text types:

1. General health sciences texts
2. Semi-technical texts
3. Technical texts

The units are shown in Table 17.

Table 17. Summary of the learning units in a core material

Types of texts	Unit numbers	Examples of texts
General health sciences texts	Units 1-2	-‘Women would trust men to take Pill’ -‘Simple drugs could cut stroke deaths’ -‘Saving lives and love’
Semi-technical texts	Units 3-6	-Drug labels -Medical leaflets
Technical texts (short) Technical texts (medium length) Technical texts (long)	Units 7-9 Units 10-13 Units 14-16	-Thai, British and American pharmacopoeias -A short article about drug discovery e.g. ‘First step in arresting Motor Neuron disease’ -A medium length article e.g. ‘Efficacy of Fluocinolone Acetonide in the treatment of oral lichen planus: A 5-year follow up study’ -A long article e.g. ‘Malaria transmission– blocking vaccines- how can their development be supported?’

In all there were 25 prepared texts provided for individual teachers to choose from to suit their own classroom situation, for both activities both in and out of the classroom.

5.2 Phase two: Implementation

This section presents the result of qualitative data from the ongoing learner-based needs analysis of the main study. As in the pilot study, action research was used. All of the adapted PA methods were carried over. In order to reveal the multiple facets of the case from different perspectives, the teacher/researcher used a narrative form to present what actually happened during the course as the effect of the implementation of PA methods. The data were obtained from a wide range of sources such as semi-structured interviews and especially from the participant observation. This phase reflects the whole cycle of the three phases of action research, i.e. planning, implementing and evaluating. The narrative of the qualitative data of classroom implementation will be presented chronologically.

The first month

• *Learners and location*

This was the first time for the teacher/researcher and the learners had met one another. There were forty learners at the beginning of the course. Two of them were in their thirties, having resumed their studies after working, but the rest were in their twenties. Most of them were females. They were very lively and enthusiastic about their study in general. However, the teacher noticed from some learners' facial expressions that they felt worried when they heard that the teacher was going to be undertaking research in class. Although she assured them that the course would be treated as normal, she knew that they were reluctant to welcome innovation, especially in English, for fear of failing the English exam. They were not confident about their English and although, they had studied the language for approximately ten years, they still could not use it effectively in a real situation. It was certain that being able to communicate in English effectively would inspire them all, but they were not

the type of learners who wanted to take risks. Failing English might affect their overall grades, which could result in their repeating the course or dropping out of university. Thus, the teacher needed to re-assure them that what she was doing would benefit their performance in other courses. Of particular benefit would be the ability to improve their language by themselves.

- ***Introducing the course***

The teacher kept in mind the goal of moving the learners forward to more self-directed learning and better reading skills. She focused from the first lesson on learner empowerment, attempting to make the best use of the limited time available through the use of PA methods as the innovative instruments for ongoing learner-based needs analysis. Therefore, in the main study -after establishing rapport with the learners through a process of their introducing themselves to each other- rather than immediately stating the course objectives, she elicited these from the learners themselves. She then provided a modified course outline and objectives based on the findings of the pilot study and the requirements of the university (see Appendix 3).

As it was clear that the learners need reading skills but also wanted speaking skills, some way had to be found to enable them to understand what they needed and wanted to learn. The first PA method: *Brainstorming through semi-structured discussion and negotiation* was used to raise their awareness of their real needs (see section no.2). The discussion demonstrated that learners wished to improve their reading skills and other skills, especially speaking and listening. This led to the agreement to use English as the medium of instruction in class. They were then encouraged to think about solving the problems that might arise if their objectives were different from the predetermined course objectives, by negotiating with the teacher during the course. If this was not feasible, it was agreed that the best method

they could use was to set their own goals and try to achieve these on their own, with some support from the teacher if necessary.

• **Encouraging collaboration**

The timetable for the target class was every Tuesday and Thursday from 8.00 a.m. to 8.45 a.m. As stated earlier the first fifteen minutes were optional, but almost all learners attended. The first two periods in the first week were spent introducing the course through discussion, negotiation and making decisions on how to redesign it according to the learners' real needs, starting from the course objectives, the course outline and the assessment.

The first half of the core material -the general health sciences reading material with some exercises- was then given to the learners. The teacher/researcher then explained how teacher and learners could co-operate with each other to better facilitate their learning by addressing their needs. This would be by using ongoing learner-based needs analysis/course evaluation (weekly and monthly) throughout the course.

The teacher/researcher then asked them to form their own groups to work together throughout the course. They were asked to discuss these issues amongst themselves after class and to submit the names of fellow group members in the next lesson. There were eight groups of five altogether. It had been agreed by the teacher and learners that five was a suitable number for effective co-operation. The promotion of collaborative work and peer monitoring underpinned the idea of group work. For example, the groups were asked to take responsibility for monitoring their own attendances and absences.

- **Getting to know the learners' problems**

The teacher introduced another PA method: *Cause and Effect*. First they were asked why they were studying English and whether they had any problems in studying it. One learner replied, '*I like it*'. It was later ascertained that she had been an exchange student in New Zealand for one year during her upper secondary schooling before entering the university. She was one of a few learners motivated to learn the language with relatively high confidence in speaking. Some said: '*I want to improve my English*'. Most said: '*I have to study it because it is compulsory*'. Most of the learners found English the most difficult subject to deal with. They were in fear of failing because they did not want to repeat the course with their juniors when they moved to higher years. Failure or bad grades in English courses could have had bad effects on their wider studies. The teacher/ researcher had found during the pre-course needs analysis and semi-structured interviews that some learners who failed or had bad grades in their English foundation courses or TEP 411 236 dropped out before they reached their third or fourth year. It was clear that although a stated interest was for the learners to be fluent in English, in reality, they just hoped to pass the exam.

The teacher asked them to identify the problems they had in studying English and to decide what the effects of these problems were. Similarly, they were encouraged to identify their successes in studying it, giving causes and effects. The learners were asked to discuss in their groups and present their results in a table under four headings as follows: problems, causes, effects and suggested solutions. The results of this activity are summarised in table 18.

Table18. Problems in studying English with their causes, effects and suggested solutions

Language skills	Problems	Causes	Effects	Suggested solutions
Reading	<ul style="list-style-type: none"> -Cannot adequately understand what has been read -Limited vocabulary -Lack of reading strategies -Do not like reading especially English -Boredom 	<ul style="list-style-type: none"> -Inadequate practice, -Laziness, dislike reading -No background knowledge -Find it too difficult -Grammatical problems esp. complicated sentences, technical terms and idioms 	<ul style="list-style-type: none"> -Lack confidence -No motivation for reading -Negative attitudes to reading English - Limited reading ability -Boredom 	<ul style="list-style-type: none"> -More training on reading strategies -More practice -Interesting learning activities -Practical activities
Speaking	<ul style="list-style-type: none"> -Cannot speak fluently enough 	<ul style="list-style-type: none"> -Do not know how to communicate effectively -Afraid of making mistakes -Grammatical problems -Do not use it in daily life 	<ul style="list-style-type: none"> -No confidence -No motivation -Avoidance 	<ul style="list-style-type: none"> -More training -More practice esp. with a native speaker -Interesting learning activities -Practical activities
Listening	<ul style="list-style-type: none"> -Cannot understand spoken language well enough 	<ul style="list-style-type: none"> -Inadequate practice -Find it too difficult esp. with different accents -Do not use it in daily life 	<ul style="list-style-type: none"> -No confidence -No motivation -Avoidance 	<ul style="list-style-type: none"> -More training -More practice esp. with a native speaker -Interesting learning activities with videos or movies
Writing	<ul style="list-style-type: none"> -Cannot write well enough 	<ul style="list-style-type: none"> -Inadequate writing skills -Not enough practice -Lack of vocabulary -Grammatical problems 	<ul style="list-style-type: none"> -No motivation -No confidence -Find it too difficult -Avoidance 	<ul style="list-style-type: none"> -More training -More practice -Interesting learning activities -Practical activities

The data presented in this table explain the vicious circle of their language learning. When they did not understand the language, they disliked it, which resulted in their avoiding it, which resulted in turn in their not understanding or trying to enjoy it. As this target course focused on reading skills, improving these was the overall priority but other aims would also be integrated into the reading process.

• **Agreement**

The results of the discussion and negotiation between the teacher and the learners were as follows:

1. English would be used as a medium of instruction to improve listening and speaking skills.
2. Reading for pleasure would be used to practise reading skills.

Knowing that the learners did not practise reading enough, the teacher led a semi-structured discussion concerning how much they read for pleasure in English. Almost all of them said they did not do this. Some openly said that they rarely read for pleasure even in Thai, let alone in English. The teacher indirectly introduced reading for pleasure through a short passage about how to encourage a love of reading in children. After finishing this short reading activity, the teacher proposed the idea of reading for pleasure. They agreed with the idea of finding their own reading materials in areas of personal interest and that they would share these with the teacher and the others in class to improve overall reading skills. The teacher had also learnt from the pilot study that some of the students would nevertheless bring nothing to class and that she would therefore need a supply of her own materials. This might be for a number of reasons such as lack of time or responsibility.

3. A trouble-shooting activity would be used to support the learners.

The trouble-shooting activity involving interactive reflection was proposed, to be combined with the reading for pleasure activity known as 'Reading for Fun'. This proved to be most successful in the pilot study, promoting self-directedness and improving reading ability. The activity invited discussion of any problem that prevented the learners from reading effectively. They were encouraged to discuss and negotiate with the teacher to provide more specific guidance, e.g. to encourage them to keep up with the lessons or practise reading/speaking for pleasure before starting the lesson.

It was impossible to prepare for or teach the learners everything they needed and wanted in this course. Although there were supposed to be thirty-two contact hours for the whole course, there were in effect fewer than thirty. Since the periods only lasted 50 minutes, actual class-time allowed approximately twenty hours to achieve the relevant learning goals. The pressure this engendered was a driving force in helping the learners to become self-directed. The pilot had indicated, however, that the necessary spirit of collaboration could be established between teacher and students only by means of the teacher slowly stepping back from the process.

- **Setting priorities in learning**

The trouble-shooting activity was carried out by using another PA method: *Matrix Scoring of Priorities*. The learners were asked to consider what they immediately needed to learn in the first month. This was carried out by group discussion and negotiation first, then by the whole class. Each group prioritized their needs by using scores for each issue. The teacher rearranged those issues according to scores suggested by each group. Then she discussed them with the whole class. The final results are summarized as follows:

1. Practise basic speaking skills in the classroom to communicate with the teacher about such general topics as how to express agreement or disagreement and how to ask different types of questions
2. Practise essential study skills such as how to organize time and use a monolingual dictionary (not necessarily an advanced one)
3. Practise important reading strategies such as reading for gist and for specific information
4. Practise necessary grammar such as different tenses and sentence structures

The process of ongoing learner-based needs analysis required problem-shooting activities that would change throughout the course, due to the dynamic nature of such a process. Since time was limited, the learners were taught and allowed to practise some of these desired skills in class, but were mostly guided towards doing it themselves away from class.

The trouble-shooting activity was considered to be self-reflective learning. It would be carried out lesson by lesson on a voluntary basis; if any learner did not want to take part they could arrive after the first fifteen minutes. The fundamental purpose of this activity was to help the learners better adjust themselves to the new methods whilst not feeling that they were being pushed out unguided into learner independence. This activity was introduced in response to the findings of the pilot study that the learners had difficulties in adjusting themselves, especially at the beginning of the course, due to the lack of some background factors such as study skills and reading strategies.

Further, this activity aimed to change the learners' attitudes towards self-directed learning to help them become gradually more responsible for their own learning. The teacher allowed the learners to decide what they needed to learn most, to help them cope with their learning problems during the course. Their choices were based on their own participatory

appraisal and were not predetermined or limited by the teacher. Since the idea of self-reflective learning also encouraged them to join in the decision making process, it was expected to help them plan their own study and also to involve them in assessing their own progress through interactive reflection.

This activity was considered as psychological and methodological preparation for the learners. They were empowered to freely express their needs and opinions as to what and how to learn. This was consistent with the original purpose of PRA methods, that is, discussing local people's needs and promoting local actions. This purpose was transferred to a classroom situation in which the learners' needs were discussed and then action was taken in the form of giving and taking responsibility for their own learning. The findings of the pilot study made the teacher/researcher realize that the purpose of this movement towards self-directedness needed to be clearly stated and instilled at the beginning of the course and intermittently thereafter to avoid frustration, misunderstanding or even resentment. To move the learners toward self-directedness was not easy, but the teacher was now more alert to some of the problems that might arise. For example, at the beginning of the course in the pilot study, some learners became frustrated and lacked the confidence to participate in the learning process. Some mistook the teacher's prompt responses to the learners' needs for an unplanned or unsystematic way of teaching. Some felt that the teacher was not taking responsibility for her teaching but expected the learners to do her work for her. Some considered that the teacher was making too many demands on their time and mental capacity in a course that was marginal to their studies. Some learners even felt disinclined to accept this method, particularly those who were not highly motivated to learn English.

The teacher now anticipated that she would meet these types of responses from mainstream learners and decided to use the first fifteen minutes before the lesson and some of

the time outside the main teaching hours for induction into her chosen strategies. The findings of the pilot study confirmed that the learners expected the teacher to be sensitive to their needs in order to generate the appropriate atmosphere for active and effective participation in their appraisal. The teacher expected to respond to this with the use of PA methods as in this trouble-shooting or reflective learning activity.

- **Actual reading lessons**

The first two weeks were spent on preparing the learners for active involvement in the learning process. The actual lessons began in the third week.

In every lesson before the project presentation in the last month, the first fifteen minutes of each lesson were used for learner preparation through the trouble shooting activity. In the third week, this focused on study skills such as goal setting, time management and using a monolingual English dictionary. After, there followed a reading lesson with three main steps:

- a. The teacher elicited information from the learners to provide or strengthen background knowledge relevant to the passage to be read. The learners were encouraged to express their views or exchange information on their specialist fields of study in order to acknowledge their knowledge and skills in these areas. This was intended to make them feel less reserved about fully expressing themselves. It was observable that the learners felt proud to see the teacher and their friends listen to them attentively while they talked about their own interests.
- b. The passage to be read was introduced. The learners were guided by signpost questions to read for general and specific information. When this

did not work well, the teacher guided them in finding the subject, verb and object of long and complicated sentences. This technique was used more often when reading technical texts. The teacher would first guide the whole class to learn how to use strategies needed to deal with a certain type of text. Then she would ask them to work in small groups and later to practise individually. The learners gradually began to read on their own in this way. This technique also helped them realize that reading was not translating as they had thought. A few problematic points were translated when necessary.

- c. The post-reading stage dealt with the fundamental grammatical structures or rules and vocabulary used in the passage. The vocabulary exercises focused on collocation, and were designed to tackle two main problems regarding vocabulary skills. The first was that the learners sometimes knew the meaning of a word but did not know how to use it in context; and the second that they had limited vocabulary. Collocation was chosen to help them learn how to enlarge their vocabulary and whilst using words in the correct context. They practised collocation by creating their own sentences from the vocabulary learnt.

In addition, the learners were encouraged during each lesson to create their own dictionary by noting down any new vocabulary they learnt with its context and collocation. As a result of this process, the learners continually reinforced what they had learnt throughout the course. This idea was evolved from a PA literacy facilitator's view that participants should not learn through literacy primers but by creating their own texts. In the ELT context,

the need for target text learning input mitigated against that. Therefore, text creation was reserved for dictionary making.

◦ ***Feedback***

Up to this stage, the teacher had ascertained that the majority of the learners had adjusted themselves well to this method. This was based on a wide range of findings from e.g. the feedback from ongoing needs analysis/lesson evaluation forms and from participant observation. Feedback for the first month reflected this.

1. What the learners liked and wanted to continue:

- *The trouble-shooting activity:* They learners said they liked this activity because it prepared them to better of the lesson. Most of them said they enjoyed the ‘Reading for Fun’ activity and liked having an opportunity to choose materials according to their own interests. They also said that they appreciated reading materials containing the latest information in their field.
- *Practicing reading strategies in class:* They valued the opportunity to read by themselves with the teacher’s guidance and support. The reading strategies, which they practised through reading activities in class, helped them learn to read with more confidence. For example, they said that finding the core of complicated sentences or guessing the meaning of unknown words using contextual clues helped them to understand how to solve their reading problems. In sum, they thought that having a chance to get actively involved in the learning process by reading the materials themselves helped them to read faster with better comprehension.

- *The collaboration between the teacher and the learners:* They enjoyed having opportunities to discuss their needs and collaborate with the teacher and others to meet their own needs.

2. What the learners did not like and wanted to change were:

- *Too many tasks:* Many learners complained that there were too many tasks to complete in a limited time. Some said that the teacher should lower her high expectations for the learners. They said that since they had never learnt English by this method they needed more time to adjust. Discussion and negotiation were used to solve these problems. The result was that the teacher would offer more guidance and support. Simultaneously, collaboration among learners was promoted more through small group work. This aimed to create a forum in which the learners could learn from one another and share responsibility without their learning having to be compromised by an unnecessary reduction in the number of tasks.
- *Being late for next class:* The learners wanted the teacher to stop the lesson five or ten minutes early so that they could attend the next lesson in their department in time. It was decided by means of discussion and negotiation that if they came to class on time they could leave five minutes early. This agreement worked well.

As already seen, according to the feedback and the participant observation, the ‘Reading for Fun’ and trouble shooting activities were most popular with the learners. Almost all of them joined in although these activities were optional. However, some learners who lacked confidence in reading still demonstrated the need to be reassured that they had done well by asking the teacher to provide support for tasks such as translating or concluding and reviewing some parts of passages.

◦ **Learners' perception of their own reading ability**

With respect to the feedback above, the teacher indirectly introduced awareness of self-directed learning focusing on reading skills through another PA method: *Well-Being Ranking*. The teacher asked the whole class whether they were satisfied with their reading ability. Most of them said 'No'. She continued, asking what they meant by a successful or good reader. Their main responses related to how well they could translate texts. They had confused reading and translation, perhaps through previous experience of learning English.

The teacher suggested three categories of readers: good, average and poor, to be discussed in their groups in order to establish criteria for each category. This was intended to help the learners perceive their own reading ability, and the criteria would then be seen as goal to be achieved. The teacher also used the criteria to adjust the teaching methodology and materials to facilitate their learning. Their suggested criteria is summarised in Table 19.

Table 19. Criteria of three types of readers as perceived by the learners

Good readers	Average readers	Poor readers
Have good attitudes towards reading and the enjoyment of reading. (8)	Have good attitudes towards reading and like reading. (8)	Do not like reading. (8) Need to change attitudes towards reading before or while being trained to learn to read. (7)
Read fast and understand the text thoroughly. (8)	Read fast and understand most of the text. (7)	Read slowly but can understand very little. (6)
Can use reading strategies very effectively. (7)	Can use reading strategies well. (8)	Cannot use reading strategies well enough. (8)
Do not rely on a bilingual dictionary. (7) Good users of grammar and vocabulary. (8)	Use a bilingual dictionary sometimes if necessary. (6) Have sufficient knowledge of grammatical rules and vocabulary to enable fluent reading. (8)	Totally rely on a bilingual dictionary. (8) Do not have sufficient knowledge of grammatical rules and vocabulary to enable fluent reading. (8)
Can read a variety of text types for both pleasure and knowledge (8)	Can read some types of text but mainly for knowledge. (6)	Cannot read different types of text well enough to gain either pleasure or knowledge. (8)

Note: The number in parentheses is the number of groups that identified this particular criterion.

It can be seen that most of the eight groups agreed on the same criteria. Each learner was required, as homework, to assess his or her reading ability with reasons to substantiate the assessment, and suggestions as to how to improve it.

The response to this activity was that most of the learners considered themselves to be average or poor readers. They all offered similar opinions as to how to become better readers, e.g. by practising reading more and with effective and adequate training, focusing on reading the authentic materials which they would need to use in their real situation.

- *Attitudes change*

Two main misconceptions among learners familiar with the traditional grammar translation method, in which the teacher is the centre of teaching and learning, were: a.) ‘a teacher was solely responsible for their learning’ and b.) ‘reading meant translation’. For example, one learner stated in the weekly evaluation form at the beginning of the course that it was the teacher’s responsibility and not hers to think about what the learners should learn. Her opinion was later modified by the implementation of PA methods focusing on empowering them to express their subjective needs and actively take part in the learning process and appraisal. Grammar translation was replaced by a wide range of reading strategies to help them learn how to read in a self-directed manner. They were persuaded to read by starting with simple texts focussing on reading for pleasure. Then came the essential reading strategies, by means of which the learners were encouraged to show full understanding of the reading themselves. Later such exercises as giving a title to a passage or identifying the tone of a text were introduced. The interaction of top-down and bottom-up reading processes was used to facilitate reading. Similarly, misapprehension about the

inappropriateness of learning vocabulary was solved by vocabulary exercises focussing on practising collocation and using vocabulary for genuine communication.

There was some resistance and resentment from the learners who could not adjust themselves well to the new methods of teaching and learning at the beginning of the first month. However, after a month, these learners showed some progress. For example, they had realised that reading lessons were not translating lessons but rather an opportunity to learn how to read on their own. This was revealed in feedback from various sources such as the evaluation forms and semi-structured interviews. They made such statements as:

'I like practising reading strategies and study skills such as using a monolingual dictionary. It helps me to read better.'

'I find reading materials with the latest information about health sciences very interesting.'

'I feel more confident as I know how to read better on my own.'

- **Conclusion**

The first month passed with few problems compared to the pilot study. The learners did not complain about the type of texts or the level of difficulty, which indicated their appropriateness to their level. Four PA methods - Brainstorming, Cause and Effects, Matrix Scoring of Priorities and Well-Being Ranking - were used to raise awareness of their target situation and learning needs. These also helped them realise their own learning problems and how to solve them.

The teacher also helped them set their own goal to be achieved through another PA method: *Daily Schedules*. In one study skills lesson on time management, the teacher discussed their daily schedules. They were in the classroom during weekdays from 8 a.m. to 5 p.m. Some days they had to continue working in a laboratory until late at night. This is common for undergraduate university students in Thailand. However, they still had some free

time after 5 p.m. or during weekends. The teacher gave them two of the timetable forms to fill in.

- 1.) The first form dealt with planning what and when they would like to study to improve their English by themselves.
- 2.) The other form required them to fill in the actual time they spent doing it.

The teacher then asked them to assess themselves in terms of how far they had achieved their goals. This activity proved to be successful because the learners learnt how to manage their time for language learning and were prepared to take responsibility for it. For instance, the first time they carried out the assessment, most of them did not achieve the goals they set and it was suggested that they should be more realistic about goal-setting. Following this, results improved. For example, some said that they had completed an assignment as they had planned after re-managing their time for that week. Others stated that they could find more time to read for pleasure in English. This in turn motivated them to further develop the process. The teacher also benefited from this activity as she used the results to adjust how much time she should allow them to complete each assignment outside the class.

The learners were much less confused or frustrated than the learners in the pilot study.

Two learners stated in the semi-structured interview that:

'At first I did not understand why they were so many things to do in this course. Normally, I just go to the class with one book and simply sit silently listening to the teacher translate the text for us. Now, on the contrary, I have to read the text myself.'

'I felt confused at the beginning because there are many handouts to fill in within one week. Some materials were given to read immediately in class, so I did not have time to prepare beforehand, such as looking up the dictionary to translate some words.'

Using feedback to adjust the course to meet the learners' needs promptly, especially in the trouble-shooting activity, interested them very much, as they considered it to be a genuine lesson. Most of the skills or strategies taught were not new to them but revision of that which they had not had the opportunity to use in the learning process in their former courses. Given the opportunity to use them for real communication, the learners could understand and apply them relatively well at this stage. Another two learners commented that:

'Though I had studied sentence structures for many years, I have just realised how to identify the cores of some complex sentences...by identifying the context like we did. I can now read better.'

'I like learning reading strategies through the actual reading process. It was very practical. I know more how to read by myself.'

The first month was the stage of discovering learners' real needs and trying to meet them. It proved to be successful to a considerable extent as shown in the feedback. The learners were more aware of their responsibility for their own learning, and read with more sense of success via reading for pleasure.

The second month

- **Coping with change**

At this stage, the materials were of the semi-technical text type. Signs of difficulty began to appear. The learners asked for more help. Sometimes, the teacher helped them to translate very difficult passages, but instead of translating for them immediately, the teacher guided them through the signpost questions. The learners were taught to think about these instead of simply responding to the teacher's questions. This was intended to enable them to learn how to set their reading goal through forming their own questions. Although translation

was sometimes used as a short cut, the learners were encouraged to try first by themselves with the support of the teacher. If this was rather easy, the teacher asked them to do it individually. If it was difficult, they did it in small groups in which they could learn collaboratively.

- *Materials and resources*

The materials for each lesson were chosen by the teacher and sometimes by the learners themselves. The teacher also provided materials from which the learners were allowed to choose both for 'Reading for Fun' and homework. When they completed a reading task, the learners were asked to assess themselves with the rating scales provided. The scales ranged from 0 (not understanding at all) to 9 (thorough understanding). They were asked to rate themselves for reading without using a dictionary, applying the strategies learnt in class, and for reading using a dictionary. This technique was also utilised for reading tasks outside the class.

Peer assessment was again implemented in the 'Reading for Fun' activity. After the learners exchanged information with each other, they would rate the material on a scale ranging from 0 (not interesting at all) to 9 (very interesting). 'Reading for Fun' proved to be very successful, as in the pilot study. The learners enjoyed their new-found freedom of choice. Some were so interested in the materials provided by the teacher that they asked her how and where to find more. The teacher/researcher had selected them from a variety of sources -largely from the UK- that were accessible to learners only with difficulty. However to encourage and enable the learners to seek out other local sources, the teacher took the opportunity to use another PA method: *Mapping*. The learners were asked to draw a map of any resources they had used/planned to use in order to find materials which would serve their

needs. These resources are summarised in the diagram below, which also indicates frequency of use, from the most frequently to the least often used.

Diagram 3. Local resources most frequently used

The library of the faculty of Pharmaceutical Sciences ➡ The library of the Faculty of Medicine ➡ The University main library ➡ The library of the Faculty of Nursing ➡ The university computer centre ➡ The self-access language centre ➡ The university book centre ➡ The Public library in town ➡ The book shop in town

The result of this activity indicated the learners' perceptions in terms of accessibility, source and cost. The learners used a variety of sources, e.g. libraries and the internet, to access materials such as newspapers and magazines. Some learners said that they had not previously bought an English newspaper or magazine to read, but that they had now bought them to read for pleasure. So, the discussion of resources had the effect of encouraging them to explore the wider potential of their learning environment.

- ***Awareness raising***

Shorter technical texts were gradually introduced alongside the semi-technical texts in order to familiarise the learners with these text types. Some of the more highly motivated learners showed willingness to try and cope with them, but others displayed little enthusiasm. To solve this problem, another PA method: *Transect Walk* was used to raise the learners' awareness of their target situation needs. The learners were asked to interview their seniors in higher years and practising pharmacists working in the university hospital or in local pharmacies who had taken TEP 411 236 previously. This allowed them to better understand their target situation needs. This exercise was a good example of the way in which PA methods enable target needs to shape a language learning activity.

They were allowed to discuss amongst themselves which pharmacists and seniors to interview. The teacher provided each group with some semi-structured interview questions and the results were presented a week later. The findings are summarised in terms of the responses to the ten questions as follows:

1. The main reason for reading in English was for academic purposes. Typical texts they had to study were reports, papers or journal articles in pharmaceutical and related fields. They also had to present their assignments and take certain exams, parts of which were in English.
2. They did not read English frequently enough except for the purposes mentioned above.
3. The main perceived sources for their materials in English were the libraries in the university.
4. Most of them did not like reading English.
5. Most of them did not read English for pleasure but for specific purposes, i.e. academic purposes.
6. The main problem with reading in English was vocabulary. They had neither adequate vocabulary nor reading strategies to deal effectively with reading for comprehension.
7. The most common strategy for solving problems in reading English was to rely on a bilingual dictionary. This did not allow for accurate comprehension, because sometimes they could not understand what they had read although they knew the meaning of each individual word. This process was time consuming and boring for most of them. Another way of tackling their reading problems was to ask a teacher or friends whose English was better than their own. Some made attempts

to improve their reading ability by practising as frequently as possible, because they knew it was crucial to be independent and competent readers for academic and professional success.

8. The interviewees had agreed on their suggestions as to how to improve reading ability: practising as much as and as frequently as possible, especially with technical texts in the pharmaceutical and related fields. They also all stressed the importance of increasing vocabulary size.
9. If they had been able to turn back the clock, they said, the types of activity that they would have undertaken were those that would allow learners to become directly involved in the reading process. Their suggestions to help themselves become competent readers generally matched two of the types of reading strategies talked about by Nuttall (1996): 1) word attack skills - guessing the meaning of unknown words from contextual clues and identifying a core of a complicated sentence; 2) text attack skills - recognizing text organization and implications, interpreting discourse markers and making references; all this on top of the necessary basic skills e.g. skimming and scanning. They stated openly that a traditional grammar translation approach did not effectively help them to read proficiently on their own. They also emphasized the importance of exposure to technical texts, especially in the form of journal articles or professional reports; this was seen as a crucial survival technique for coping with the tasks that required English reading in higher years. They said the higher the year of study the more they needed to read in English. The problem was that the greater the requirement to read, the more difficult they found it.

10. They currently used English most for reading English texts on subjects related to their specialist fields of study.

The teacher made use of this activity to increase the learners' attentiveness to their target learning needs as well as promoting self-directed learning, encouraging them to say what they had learnt from the findings and what they planned to do in order to avoid the problems of their seniors. Their response was that they needed to familiarize themselves with technical English texts by practicing more both inside and outside the classroom. This encouraged the learners to make more effort with the technical texts.

• *Signs of progress*

The learners had demonstrated their progress through actively participating in the learning process. They hardly ever missed lessons unless without good reason. The increased degree of active involvement in the learning process was even noticeable to outsiders such as their peers from other classes although those two classes were not supposed to be control groups but the learners studied in the same department so they knew one another well.

For example, one learner taking the same course, but in a different class with another teacher, simply talked to the teacher/researcher: '*The learners in this class have a variety of activities but we don't. We take the same course with the same course material. Why are we learning with different methods?*' She told him that what they did was the result of discussion and negotiation between them and the teacher and suggested they propose this idea to their teacher. He said his teacher, while suggesting that they read on their own, still used the traditional approach, whereas what he needed was some kind of learner preparation that enabled him to do that himself. He said if he was to become a more independent learner he needed the type of guidance and support from the teacher that this target class were getting,

and there could be no solution without negotiation. The teacher/researcher was reminded of 'learning methodology' in relation to learning independence. Dickinson stated: 'In our concern for teaching methodology, we sometimes lose sight of the learner'; he proposed a learning methodology whose central thrust 'is not to dispense with teaching methodology (or indeed teachers) but to balance it and enhance it by looking for answers to the question - 'How can we best help our students to learn how to learn?' (Dickinson 1995: 89). In order to prepare the learners to be more independent, he emphasised the necessity of psychological preparation - i.e. changing their attitudes, developing their confidence and self-esteem - and methodological preparation - i.e. cognitive strategies (essential learning techniques) and metacognitive strategies (managing learning) (ibid: 90-91).

At this stage, the teacher noticed that not only could the learners read better, but they had also been encouraged enough to engage in a critical discussion of their chosen materials. Most of them enjoyed this kind of post-reading discussion activity. As one learner commented, *'I liked this democratic way of learning because I could express my own opinions even when they differed from the teacher's or those of the others in class'*.

Although the learners in this class knew that the other two classes had less work to do, most of them expressed the view that did not feel disadvantaged. On the contrary, they mostly thought that they had gained greater and deeper knowledge within the time constraints, while some in the other classes felt they were missing out. Signs of resentment or resistance to the methods used became fewer and fewer as the course progressed. When they were preparing for other subject exams, the teacher/researcher acknowledged their busy schedules by reducing the number of tasks. She also provided materials for the learners to select during the reading for pleasure activity so that they would not have to find the

materials themselves. Thus, the learning processes went well as a result of meeting their needs at the right time. This was reflected through some of the learners' feedback comments:

'Now I realise that reading is not translating. I understand what I read better without knowing every word.'

'I enjoy learning as long as the teacher is not too serious about it.'

'It is very useful to review reading strategies and other study skills while practicing reading.'

'I am starting to realise that I have to do many things to improve my level of English. I will try my best to do so, but please do not expect too much from us. If you do, the atmosphere would be too serious, which would not help us to enjoy learning.'

◦ **Conclusion**

The first half of the semester finished at the end of the second month. While the other two classes had covered the pre-set materials as planned in order to be ready for the midterm exams, the target class had in addition used various PA methods which had effectively enhanced learner centeredness. Learner training and learner involvement had developed simultaneously. They began to show signs of becoming self-directed learners by becoming more responsible, for example, completing assignments on time and rarely missing the class. Their performance in various reading activities indicated their improved reading skills, particularly in respect of discipline specific authentic texts.

As is common in teaching and learning situations, not every learner had the same level of progress. Those learners who did not get involved in the learning process did not progress as well as the majority who did. Unsurprisingly, their progress depended on individual effort. It was clear that the more the learners got involved in the learning process, the better they progressed according to findings from the participant observation and interviews (see section 5.3.3 for more data). They also cooperated in the learning process

despite knowing that this would not count towards their course grade. They did this purely for their own language improvement and in response to the interest in learning generated by the project.

The third month

◦ Becoming reflective learners

The feedback from various sources such as the weekly and monthly evaluation forms and participant observation showed that the learners were starting to reflect more deeply on the learning process. They were also becoming more familiar with the use of PA methods. At this stage, the method most frequently used was brainstorming through semi-structured discussion, and negotiation of the points raised by feedback sessions. Strong evidence of the change of attitude toward self-directedness gradually emerged. The confidence with which learners approached reading tasks was increasing:

'I was surprised that I could read an authentic text by myself.'

'I had never bought any English magazines, but I have now. I can read for pleasure now.'

'I have never felt successful in English before, but this time I made it.

My exams scores are much better. More importantly, I am more confident in my reading. I understand it much better.'

However, the learners still found it hard to read longer authentic technical texts.

◦ Introducing technical texts

The teacher tried to solve the problem of preparing the learners to read technical texts by getting them to read general health science and semi-technical texts for pleasure first. However, the gap between even their improved reading skills and those required for reading authentic technical materials was still too wide given the limited time and lack of background

knowledge and specialist vocabulary. In order to help bridge the gap the teacher/researcher continued to encourage the learners to read for pleasure and provided more support in terms of necessary reading strategies and essential information. She also encouraged the learners to search for background information on particular issues. The learners were then required to present their information in class or to exchange this with others in groups. The problem of limited background knowledge was solved by learners acquiring more detail from texts in Thai, or if necessary, by asking their seniors and subject teachers. This yielded a satisfactory outcome, because the learners liked making contributions in areas in which they could do so with knowledge and enthusiasm, particularly in their own fields of study.

The teacher tried to help the learners to deal with reading longer authentic technical texts by using a short technical text first and asking each group to concentrate on a different paragraph. The teacher also monitored the class more closely by paying more attention to what they needed and expected whilst offering the necessary support. For example, if they asked her to translate some parts for them, she would convince them to attempt the task under her guidance, or she would ask them to help to translate it. Each group then took turns to present their piece of text, in the form of responses to the sign- post questions, a summary of their paragraph or even the translation of a paragraph from the chosen text. In this way, the learners gradually felt more confident about reading the whole text. Although the process progressed only gradually, the most beneficial aspect was that the learners undertook the learning process themselves as they were trained to read through involvement in the reading process.

- ***Encouraging more involvement***

In order to encourage even greater involvement, each group was assigned responsibility for a particular section of the text and prepared their own sign post questions to

ask the other groups in the next lesson. This had to be done as homework because there was no time to read in class. This necessitated a combination of presenting and exchanging information. The teacher required each group member to take a turn in presenting the work, to prevent all the work being done by one or two people from each group. In this way, everybody had an equal chance to take part in the learning process. The teacher also provided necessary guidance and support outside the class for group consultation prior to the presentations. This turned out to be a most effective activity. The learners said that they felt the work was more manageable due to the co-operation of their peers and the support of the teacher. Some commented:

'At first, I could not imagine that I would be able to understand a technical text but I did. I feel more confident.'

'Working in a small group makes me learn more from friends and it makes the work easier.'

'I have learned how to read a long technical passage with more understanding.'

• **Conclusion**

The feedback showed the learners felt very positive about the outcome of the learning process. The learners had gained greater knowledge and confidence, enabling them to move on to a higher stage i.e. reading a longer text in the form of a journal article. They had read a variety of authentic general health science, semi technical and technical texts approached from the two perspectives of reading for pleasure and for academic purposes. It could therefore be concluded that up to the third month of the course, there was solid evidence that

the learners felt they were being well prepared to deal with target situation texts while developing a surer grip on the true nature of that target situation.

The fourth month

• Coping with technical texts

At the beginning of the fourth month, the teacher began to tackle the issue of how best to approach the reading of authentic target situation texts. This problem was not effectively solved in the pilot study because not enough time was left after having studied general and semi-technical texts. In the pilot study, the teacher had tackled only one journal article, some of which the learners were assigned to read themselves with the guidance of what they had learnt in class. However, because this was undertaken at the end of the course, there was no time to observe their real progress. As a result, the teacher again used the PA method:

Brainstorming: semi-structured discussion and negotiation, to raise the issue of finding the best way to cope with authentic technical texts under severe time constraints. The findings of the pilot study proved that it was not appropriate to introduce this text type at the beginning of the course because the learners were just not ready in terms of their attitudes, motivation, background knowledge, reading ability and so on. It was also impossible to cover five or six journal articles within a few hours, as each text might consist of at least three to four pages. However, this was the most crucial part of the course, as the findings of the two pre-course needs analyses and the ongoing learner-needs analysis in the pilot study had revealed that the learners would be reading mostly journal articles in their higher years of study. The findings also showed that the learners could not read the journal articles effectively enough to complete the tasks that they were assigned.

- **Joint decisions**

Brainstorming: semi-structured discussion and negotiation was intended to promote learner involvement in order to develop self-directed learning. The question raised was: *'If you were the teacher, what would you do in teaching this type of text to help your learners best meet their needs in order to enable them to read more independently?'* This was one of the most genuine PA implementations used in the study. After the discussion and negotiation, the consensus was that the teacher should explain in detail how to read one journal article as an example for the class, bearing in mind the need to encourage the learners to take part in the learning process as much as possible. The method focussed on analysing the structure of the journal article. For instance, the teacher guided them in fully identifying headings such as the title, the author's name and address, the abstract, introduction, objective, research method, result, conclusion and discussion. The learners were asked to respond to signpost questions for each part of the article. They needed to apply the acquired reading strategies during the reading process and to read for specific information within each main section. Thus, for example, the efficiency of their reading would be demonstrated through their answers as to whether or not they could accurately identify the overall message, its main ideas, supporting ideas or recognise the presuppositions underlying the text or implications and then making inferences accordingly. After completing the reading process, the teacher demonstrated how to present the text to the class using, where necessary, visual aids such as OHP transparencies and photographs. She also taught some essential presentation techniques, such as presenting only the important information in note form on transparencies, thereby raising questions for those to whom the information was being presented. The teacher allowed the learners to ask questions about the presentation of this type of text.

- ***Taking action***

The teacher and the learners then discussed how to present the rest of the journal articles provided in the core materials. The following consensus was reached:

- 1) There were 5 technical texts (one medical report and the four journal articles for which the learners agreed to draw lots).
- 2) The learners formed five new groups of eight, again choosing their own members. The larger numbers of group members were appropriate to the amount of the work involved.
- 3) In order to encourage everybody to read all of the five texts, the teacher assigned a particular task for each group to carry out as presented below:

The five texts assigned for were:

- i. 'National Institute for Clinical Excellence (Nice) with the pharmaceutical industry'
- ii. 'Cholera's deadly viral passenger'
- iii. 'Malaria transmission-blocking vaccines- how can their development be supported?'
- iv. 'Gastric decontamination'
- v. 'Relationship of Clomiphene dose and patient weight to successful treatment'

The teacher and the learners discussed how to divide the work between the learners in order to give everyone a chance to get involved in reading every passage and to in taking part in every presentation. Whilst this is what teacher had planned, she was successful in eliciting this kind of procedure from the students themselves. Each group would take responsibility for one task and the way in which they approached it depended on the consensus of the class.

The agreed tasks were as follows:

• *Presentation of texts*

The agreed presentation of the texts is shown in Table 20.

Table 20. Schedule and tasks for each group presentation

Text no.	Present content	Ask questions	Present vocabulary & collocation	Present complicated sentence structures	Present summary and add comments
Text no.1	Group no.1	Group no.2	Group no. 3	Group no.4	Group no.5
Text no.2	Group no.2	Group no.3	Group no.4	Group no.5	Group no.1
Text no.3	Group no.3	Group no.4	Group no.5	Group no.1	Group no.2
Text no.4	Group no.4	Group no.5	Group no.1	Group no.2	Group no.3
Text no.5	Group no.5	Group no.1	Group no.2	Group no.3	Group no.4

Thus, every group had to read every text in order to complete their tasks, and were required to give a presentation on each of the five aspects identified in the above table. In one fifty minute lesson, ten minutes were allowed for the group presenting the content, but only eight minutes for each of the other groups, because the teacher needed to give feedback for eight minutes after each presentation. The presentation of each text needed to be completed within one period according to an agreement between the learners and the teacher. It was agreed beforehand that the teacher and learners would arrive promptly, in order to spend the whole 50 minutes on this project. An essential pre-requisite for the presentation was that each group had to discuss their work with the teacher before presenting it. This project was intended to play a significant role in empowering the learners. This part was partly done in the pilot study as there was not enough time near the end of the course due to many major changes in at the beginning of the course. In this project, the students had to make their own decisions in order to carry out their tasks, and their own choices in order to organise and

perform their presentation as well as possible. The teacher provided necessary facilities such as OHP, transparencies and coloured pens. Each group arranged to discuss their work with the teacher outside the class at a time convenient to both at least two days before the presentation. This was called a 'tutorial session'. The teacher would provide essential guidance and support and help correct any mistakes before the work was presented to class.

In addition, the learners were required to evaluate each presentation using the evaluation sheet provided (see Appendix no. 5.1). Apart from stimulating active participation, this process of evaluating or assessing a peer's presentation, aimed to raise the learners' awareness of creative and critical thinking by means of reflective judgment upon the quality of both the work of their classmates, and ultimately their own work as well. Further peer assessment was carried out in the form of each group evaluating its own group members for their contribution to group work. The aim of this type of peer assessment was to foster a stronger group dynamic through sustained co-operative activity. This also helped the learners make an indirect self-assessment in reflecting on their own effort to collaborate with the others in the group, and it was hoped that this would result in a greater awareness of the benefits of self-directed learning for self-development.

- *Evaluating the project*

The learners were highly motivated to get involved with this project because two parallel journal articles similar to these five texts would appear in the final exam. It was essential for them to be adequately prepared to cope in the exam through practising reading as many journal articles as possible.

The experiment unfolded through trial and error on for both the teacher and the learners. For instance, one group could not agree with one member about the task to be presented. The teacher needed to negotiate with both sides. Eventually, the majority decided

to let this one member follow their preferences and work alone based on the acceptance of an individual difference. He chose to present a summary of the text while the others did the rest of the work. He performed the task well and was clearly somebody who worked better on his own and knew it. He learnt to work in the way he found most effective, even if that meant opting out of a co-operative activity. The teacher realised that any dogmatic prescription as to the nature of independent learning would undermine the concept itself. The presentation concentrated learners' minds upon the analysis of their own shortcomings and persuaded them to seek help from the teacher with their own identified weaknesses. The teacher's feedback to the first group was the subject of some resentment from those learners who thought that the teacher expected too high a standard. They complained that they were very busy and under stress as the final examination drew near. Some of these comments were found in the faculty course evaluation form that was distributed immediately after the teacher gave told the learners that they needed to present their work again. The teacher responded to the learners' complaints by asking some groups to present their work outside the time-table at a time of mutual convenience. In contrast to the first presentation, the presentations that followed showed a dramatic improvement. Some students from other classes came to watch the presentations and remarked on the quality and effort demonstrated. They also noted how they had often seen these presenters working in their groups after the class and had been surprised by their commitment to work which others had not been set. Their observations were confirmed by the attainment of a new and consistent level of participation. The usual drop-off in English class attendance prior to the examination was less evident. Almost all of the learners in the main study attended the course until the last lesson.

- *Reaction from other learners through conversation*

The target learners' interactive participation in the learning process was very pronounced and their motivation surprised learners from other classes. They were all the more surprised as they had thought the target learners not to be as hard working as themselves and felt underprivileged because their own class was not taught similarly. They felt that they had gained less knowledge and fewer skills than those in the target class, and had been left to present some of these texts on their own without adequate preparation. They had received neither suitable guidance nor support, or feedback as to whether or not they had done their tasks correctly, which they said was a crucial part of the learning process for them. They were impressed with the discussion occurring during the feedback session at the end of the presentation, when the teacher/researcher and the learners became so actively involved that it seemed as if the learners and the teacher were debating with each other in order to reach an agreement. They could see that both sides had thoroughly prepared themselves to exchange information, which gave them greater confidence in the teacher, who remained a respected source of information for them. They felt that they should have had an opportunity to do the same.

However, some were not sure whether they would really like it or not, because there seemed to be much more work to do compared with their own class. This fear of a higher workload was also expressed by some learners in the other class with whom the teacher had a conversation. They felt that the learners in the main study were required to do many things on their own, something of which they were afraid. They were reluctant to choose this method and seemed to believe that the traditional grammar translation method suited them well. This was in fact true for them because they had not been given preparation for learning by other methods.

The comments from the learners in other classes reflected the importance of learner training and learner involvement in developing positive attitudes and motivation towards the innovative method. Their attitudes and motivation played a vital part in helping the target learners move toward more self-directedness. The comments from these other learners showed that most desirable was a middle way, between leaving the learners struggling on their own to become self-directed without any or adequate preparation either psychological or methodological, and doing so much for the learners that they did not have a chance to become involved in the learning process themselves.

- **Conclusion**

One prominent effect of the implementation of PA methods was a change in learners' attitudes to and motivation for learning English and self-directed learning. They actively participated in the learning process with their own appraisals. For instance, although there were no higher grades offered for doing extra work, what kept them going was the realisation of their own language development. Their reading skills had improved, which helped them to enjoy reading with a greater sense of achievement. These developments were reflected in some of their comments:

'Doing the learning myself makes me feel more confident that I have genuinely learnt more.'

'Time is too short. I wish there was more time to practise so that I could improve my language much more.'

'It seemed that I did not learn only to pass the exams but also learned to enjoy the learning as well. So, I feel I can actually read better.'

The last month of the course focused on presenting journal articles. Through this process the learners simultaneously learnt new knowledge/skills and transferred those they had acquired during the course. This process successfully enhanced genuine learner

involvement with a high level of learner empowerment, employing all the necessary processes for their advancement such as decision-making, self-assessment and peer assessment. For example, the learners were encouraged to decide within their own group how best to present their project and who would be responsible for which specific task. Apart from frequent self-assessment in reading activities during the course, the learners were also encouraged to evaluate their peers' performance in their project presentation by the use of an evaluation form (see Appendix 5.1). The teacher also asked the class to anonymously evaluate each of their own group members for his or her overall cooperation within the group.

Both the teacher and the learners were gratified by the results of the activities arising out of discussion and negotiation throughout the course. A summary of the progress of learner training and learner involvement during the course is presented in Diagram 4.

Diagram 4. Summary of the progress of the learner training and learner involvement

Learner empowerment ➔ more learner involvement ➔ more awareness of own needs ➔ more responsibility for own learning ➔ more confidence in own language ability ➔ more efforts and commitment ➔ greater independence ➔ language improvement

Although most of the work had been completed as expected, the course was adjusted to suit the situation at particular times. Genuine learner centredness, with a syllabus arising out of the considerable collaborative efforts of the learners and the improvement of their attitudes, motivation, self-directedness and reading skills was unmistakably evident to all involved in the study. This provided a very satisfactory response to all the research questions (see section 3.2.2.2). That is PA methods as the instrument of learner-based needs analysis enhanced learner centredness and helped

raise the learners' awareness of their target situation and learning needs. The methods also helped the learners improve their attitudes towards learning English and motivation for learning it. They did not only improve learners' attitude towards self-directed learning but also moved them towards greater independence or more self-directedness. This in turn helped increase the learners' reading skills.

5.3 Phase three: Evaluation

This section deals with the discussion and presentation of the quantitative data obtained from 1) the semi-structured interviews at the end of the course, 2) the pre/post questionnaire, 3) the course evaluation forms distributed by the teacher and the authority i.e. the faculty and 4) the follow-up study questionnaires.

5.3.1 Result of the semi-structured interview

After the teaching had been completed, the teacher asked the learners to come for semi-structured interviews which were tape recorded. These were conducted with individual, pairs or in small groups of learners as they wished and at mutually convenient times. The interviews were comparable to simple conversation with the learners because they were very informal and both teacher and learners felt free to express their feelings and opinions. After the interviews, the teacher and the learners involved in the interview sometimes went to have something to eat together in the university canteen. The teacher acquired extra information during these occasions. In this non-classroom environment, the learners revealed some details which the teacher would not have expected to be given in class. The themes of the data analysis were based on the main questions asked (see appendix 3.6), and are summarised below.

- *Sense of achievement*

The results of the interviews revealed that 87.18 % of the learners (34 out of 39 - one dropped out of the university in the middle of the semester) stated that they thought the course had achieved its goal to move them towards greater self-directedness and better reading, although the degree of achievement varied according to their perception of their own language improvement. Most learners stated they felt more successful in learning using this method while only a few of them said they felt moderately or a little successful. However, all of them accepted that they were aware of their own responsibility for their learning success. When asked whether they would like to take another English course, most of them said 'Yes', but their preference was for an optional course without any pressure of being graded, which reflected their improved attitudes to and motivation for learning English. This positive effect of the intervention is evident in the following quotations transcribed from recordings of the semi-structured interviews:

'I have never studied English in a democratic way like this before. I like it very much. I did not understand much at the beginning but as the course progressed, I am confident enough to read a long and authentic text. In the past, I had never thought I could read such a text. I am surprised that now I enjoy reading English.'

'I wish there was more time to practise. It seemed to be too short to complete many things in this course. I can read better and I enjoy reading more anyway.'

'Though my language ability still needed to be improved a lot more due to my poor background knowledge in English, I feel more confident that I could gradually improve it on my own.'

'My feeling towards English hasn't changed much because I have never really liked it since I started studying it. I tried my best to attend every lesson but I don't think I can improve very quickly like the others due to my poor English background knowledge. Nevertheless, I have learnt how to improve it on my own.'

- *Sense of confidence*

The overall findings were positive. 76.92% of all learners (30 out of 39 learners) felt more confident in reading and gained greater satisfaction in learning English through the method used. They said they had actively participated in every step of the course and undertook the learning themselves. Some said they should have learnt in the same way before, in their former courses. They expressed the belief that this innovative method significantly raised their awareness of the need to improve their language ability through self-directed learning in order to cope with their target situation needs both for their higher years of study and future career. Others even stated that they should have had more time to be trained further by this method, because they had become conscious that they would be left to learn English on their own in the near future.

Similarly, 84.62 % of the learners (33 out of 39 learners) said they could read better or felt more confident that their reading skills could be improved in the future as they felt they had been successful in reading during the course. Some even stated that they were surprised with their improvement in reading, and that they had never thought that they would be able to read with more understanding and at speed. More importantly 89.74% of the learners (35 out of 39 learners) said they had gained more confidence in reading authentic technical texts. Some admitted that they had felt scared of reading a long journal article but no longer did. The others accepted that the course had been successful in enabling them to become more self-directed as they now knew how to read on their own and felt confident in transferring what they had learnt into their real target situation. In sum, the findings from the semi-structured interviews at the end of the course were positive responses to all research questions (see section 3.2.2.1).

5.3.2 Result of the pre/post questionnaires

This section will present the data of the questionnaire consisting of six main parts. They are about general information of the learners, their attitudes towards learning English, motivation for learning English, attitudes towards self-directedness, preference for learning styles and reading practices in general. Each part of it will be discussed with respect to the research hypotheses. All of the questionnaires (39) were returned. One learner had left the university in the middle of the course, and another did after the course. There were thirty-eight learners remaining at the time of the third follow-up study eighteen months after the course. All the answers given in the pre and post questionnaires by each learner were analyzed using SPSS-PC (Statistical Package for Social Sciences, Version 5.01). The result of each main part of the questionnaire -parts two to five are presented with relevant responses to the research hypotheses.

5.3.2.1 Part one: Learner General information

The first part of the questionnaire covered general information about the learners. There were twice as many females as males. The average age of the learners was twenty, the oldest being thirty and the youngest eighteen; there were two mature learners. The average number of years they had studied English was ten, with seven years as minimum and fifteen years as maximum, depending on which type of schools they had attended before their secondary level. (The private schools started teaching English earlier than the government-run schools; students who attended the former had taken more English courses than those who had attended the latter.)

5.3.2.2 Part two: Attitudes towards learning English

Part two concerns the learners' attitudes towards learning English, as reflected through twelve statements (see appendix 3.7). The results are shown in Table 21.

Table 21. Result of learners' attitudes towards learning English

Learners' attitudes towards learning English	Means	S.D	No. of subjects	t-test	df
Pre	61.0	4.2	38	0.22	37
Post	61.2	4.2	38		

The result of the t-test ($t = 0.22$, 37df, $p > 0.05$) was not significant. However, it was positive. A change in the learners' attitudes towards learning English was expected, as stated in hypothesis two (see section 3.2.2.1). The absence of a significant change may have been due to the influence of these three main factors. Firstly, TEP 411 236 was one of the compulsory subjects in the target situation, which the learners could not avoid at any level of study. Some of them openly stated they had never liked studying English and had never thought they could be successful in it. Further this course was an intensive course, which could sometimes be quite stressful. Secondly, the learners had to adjust themselves under four main pressures: 1.) new methods of learning, 2.) time constraint 3.) grades and 4.) limited reading skills and background knowledge in their special field of study. Many of them clearly stated that they would have enjoyed learning English much more if there was no pressure to achieve certain grades. Thirdly, a possible explanation is the interrelation of attitude to/motivation for learning and learning achievement. A case study of attitude, motivation and achievement in the English language learning of high school students by Haque (1989: 250) revealed a consistently positive relationship between attitudes towards learning English, motivational intensity and the desire to learn English, with measures of achievement. This could well explain the modest change in the learners' attitudes to English

learning in this situation. Some learners openly said that they had never felt they were successful in learning the language because they could not read and speak well. Most of them related this opinion to poor grades, that is, to the fact that they had never obtained a good grade in English before taking this course.

Attitude to and motivation for language learning in this situation was not closely related to the need for or the importance of the language itself. The learners were aware of the need for and importance of the language to some extent before the pretest, but their consistently negative experiences of learning in terms of uninteresting methodology and poor grades had dramatically damaged their attitudes towards learning the language.

However, the learners' attitudes towards learning English improved to some extent during this course, as their needs were appropriately addressed through the PA methods. They also directly experienced a newfound sense of success in learning the language through the many activities carried out during the course, especially the 'Reading for Fun' activity. They had, and enjoyed, the freedom to choose what they would like to learn and how to learn it at their own pace or level of difficulty. Their attitude gradually changed from one of thinking learning English dull initially to one of finding it interesting and fun by the end of the course. This was consistent with the findings from semi-structured interviews and the narrative of the qualitative data, which expressed how the learners not only put more effort into learning and appraising, but also gained more enjoyment from learning than they had thought possible or expected. All of the findings indicated an alteration in their attitudes toward English, which steadily became more favourable as the course progressed (see section 5. 2.3.2.7 part one). Thus, hypothesis two i.e. the implementation of PA methods has a positive effect on learners attitudes towards learning English was partly confirmed.

5.3.2.3 Part three: motivation for learning English

The third part of the questionnaire was related to the learners’ motivation for learning English. This was investigated through fourteen statements (see appendix 3.7) and the results of the data analysis are presented in Table 22.

Table 22. Result of learners’ motivation for learning English

Learners’ motivation for learning English	Means	S.D	No. of subjects	t-test	df
Pre	72.3	8.9	38	-0.64	37
Post	72.2	8.2	38		

The result of the t-test ($t = -0.64, 37df, p>0.05$) was not significant. It appeared to indicate an unexpected result: the learners’ motivation for learning English was slightly lower at the end of the course. There are some ways to explain this finding.

Firstly, as mentioned in the discussion of the implementation of PA methods in relation to the learners (see section 5.3.2.2), it is true that the learners in this class had to adjust themselves to a considerable degree to the new method, of which many said that it was the hardest way in which they had ever learnt English. Some said they would like to learn English in a stress-free situation, i.e. without credits, especially in higher years, in which they needed to focus more on their specialist subjects. They did not want to take risks if their English grade was counted as part of their total grade. The findings of the pre-course needs analysis revealed that about 5 % of learners who dropped out in their higher years had achieved very low grades or failed in either foundation English courses or TEP 411 236.

Secondly, most of the learners felt they had never been successful in learning English in spite of many years of studying, especially with respect to speaking skills, which was mostly related to their confidence in expressing their needs. Unfortunately, even in this course, which was intended to serve their real needs through the negotiated syllabus, there

was not enough time to focus on their immediate needs or wants in terms of speaking and listening skills. This might have caused them to feel unfulfilled. This lack of the sense of success could be one of the most influential effects on the learners' motivation, because motivation was closely related to achievement. The learners' real reason for studying English was that it was compulsory, and their greatest motivation was to pass the exam, which is a fact of life for all learners.

Lastly, the timing of the distribution of the questionnaire might have affected the result. The learners filled out post questionnaires at the end of the course while they were very busy with their projects and preparation for the approaching final exam. This caused them a great deal of stress, and though the learners cooperated well in completing their project presentations, some stated that they would rather spend more time on their specialist field of study.

However, from other sources of data, such as the narrative of qualitative data, it indicated that their motivation gradually moved in a positive direction as the course progressed. They enjoyed learning more for the sake of their language development rather than for passing exams and good grades. This was clearly demonstrated by their active participation in the learning process and appraisal. They had to undertake many more tasks during the learning process than the learners in the other two classes in the same course. They were motivated to complete these tasks and did not feel disadvantaged. On the contrary, their motivation for and commitment to improving their language ability and accepting more responsibility actually increased. More importantly, their comments in the interviews indicated that they would like to study more English, but without the pressure of credits because they did not like learning under pressure. They began reading for pleasure. They had made great efforts during the course to improve their language ability, something which most

of them accepted they had never done before. This improved cooperation from the learners through active participation in the learning process is evidence of a heightening of their motivation to learn English, which partly confirmed hypothesis three i.e. the implementation of PA methods has a positive effect on learners’ motivation for learning English.

5.3.2.4 Part four: Attitude towards self-directedness

Part of the questionnaire detects the learners’ attitudes towards self-directedness, which was investigated by means of twenty- four statements (see appendix 3.7). The result of the data analysis is shown in table 23.

Table 23.Result of learners’ attitudes towards self-directedness

Learners’ attitudes towards self-directed learning	Means	S.D	No. of subjects	t-test	df
Pre	112.1	10.9	37	4.13 **	36
Post	118.9	12.7	37		

The result of the t-test ($t = 4.13, 36df, p<0.001$) was significant. A big change in the learners’ attitudes towards self-directed learning as the ultimate goal of this research study had occurred, as expected. The findings from the narrative of qualitative data analysis and semi-structured interviews also strongly supported this result, showing the learners’ attitudes towards self-directed learning had greatly changed for better, thus assisting them to become more self-directed.

The learners became much more aware of their responsibility for their own learning. They had put this into practice through their dynamic and active participation in the learning process throughout the course. Thus, both hypotheses four and five were deemed to have been largely confirmed: that the learners’ attitudes towards self-directed learning were

significantly improved, and they became more independent/self-directed as a result of the implementation of PA methods.

5.3.2.5 Part five: Preference for learning styles

Part five of the questionnaire deals with the learners’ preferences for learning styles by means of twenty statements (see appendix 3.7). The result of the data analysis is shown in Table 24.

Table 24. Result of learners’ preference for learning styles

Learners’ preferences for learning styles	Means	S.D	No. of subjects	t-test	df
Pre	94.3	7.9	36	0.06	35
Post	94.3	6.6	36		

The result of the t-test ($t = -0.06, 35df, p>0.05$) revealed no significance. This might have been because two different categories of statements were put in the same part of the questionnaire. The first eighteen statements were used to detect the learners’ preferences for learning styles reflecting learner empowerment, but the last two statements investigated their confidence in being trained to become self-directed and their readiness for self-directedness. Further, some learners might have been confused when responding to the combination of positive and negative statements presented in this section. They completed it in a hurry during their final exam preparation and presentation. Lastly, it should be taken into consideration that it was not easy for some learners to change their ways of learning in order to adjust themselves to the innovation. This new method of learning appeared to be the opposite of that with which they were familiar: traditional grammar translation and a teacher-dominated method. Further, this method is still used in most of their other courses.

With particular reference to the last two statements, it should be borne in mind that classroom culture may have influenced the learners to be humble and modest in expressing

their opinions, especially with regards to their ability, and in particular in addressing a senior or superior authority such as a teacher. Humility is believed to be one of the essential virtues in Thailand's hierarchical society. This may have been the reason why many capable learners stated, contrary to the findings from many sources, that they were not ready to learn on their own.

In the light of all the efforts that the teacher/researcher had undertaken to address the learners' needs and the problems that occurred in the process of so doing, she wishes to bring attention to the limited degree of independence that she was likely to be able to help the learners to achieve in approximately twenty contact hours, with their initially limited level of language ability and poor attitudes to and motivation for learning English. It was realistic for some of them to accept, even at the end of the course, that they were not sure they were ready to learn on their own. They still needed to try out what they had learnt in the course to see whether or not they could transfer it to their target situation. The best thing the course could offer was to help improve their attitudes toward self-directed learning and thus help move them to become more self-directed and competent learners, equipped with learning skills needed to develop their ability after the course.

However, the findings from other sources such as the narrative of qualitative data and the results of the course evaluation conducted by the university, indicated that learners preferred the learning styles that promote learner empowerment, such as joining in the decision making process, setting their own goals, selecting material and methodology as well as carrying out self-assessments. All PA methods used entailed learning activities that raised the learners' awareness of what and how they needed to learn, since they directly addressed learner needs and encouraged them to take action in respect of their own learning.

The learners' efforts in active participation in their own appraisal, through the ongoing learner-based needs analysis from which genuine learner centeredness evolved was unmistakable evidence of the success of the intervention. In consideration of the newly identified significant development of their attitudes towards self-directedness (see section no.5.3.3.4) including the findings from semi-structured interviews, there are strong indications that the implementation greatly helped raise learners' awareness of their target situation and learning needs so that they become actively involved in their learning process with increased confidence in their reading improvement. All findings clearly indicate the way in which the learners gradually became more responsible for their own learning and less dependent on the teacher as the course progressed. This suggests conformation in part of hypotheses one and five: that PA methods indicated the shift from a teacher-centred to a learner centred approach had gradually developed the learners' awareness of their target situation needs and learning needs, to their own benefit

5.3.2.6 Part six: Reading Practices in general

The final part of the questionnaire investigated the learners' reading practices in general. Seventeen statements or questions were used to detect changes in reading behaviour between the beginning and end of the course (see appendix.3.7).

Due to the complicated structures of some of the questions in this part, to make the interpretation of the data easier to understand, the data were analyzed in terms of percentage and only the significant results are presented in Table 25.

Table 25. Main findings of learners' practices

No. of statement/ Question	Reading Practices	Pre test	Post test
1.	Reading is the most accessible way to gain knowledge.	Yes 89% No 10 %	Yes 92% No 7.1%
2	I love reading.	Yes 71.8% No 28.2 %	Yes 87 % No 12.8 %
3	I like reading. -In Thai -Both in Thai and in English	71.8% 28.2%	74.4 % 25.6%
4	I read for academic purpose -both in Thai and in English -in Thai more than in English. -the same amount in both.	Yes 56.4 % Yes 97.1 % Yes 2.9 %	Yes 59.0 % Yes 93.5 % Yes 6.5 %
5	I read for pleasure -in Thai more than in English. -in English more than in Thai -same amount in both.	Yes 89.7 % Yes 0.00 % Yes 10.3 %	Yes 82.1 % Yes 11.1 % Yes 17.9 %
6	I like reading authentic texts.	Yes 31.6 % No 68.4 %	Yes 35.9 % No 64.1 %
7	I always find time to read interesting materials for pleasure -in Thai -both in Thai and in English	Yes 68.4 % Yes 28.9 %	Yes 43.6 % Yes 56.4 %
8	Frequency of reading English text (2-3 days a week)	18.4%	28.2 %
9	Length of time reading e-mail in English (1-2 hours at a time)	21.2%	41.1%
10	Time of reading -Reading English texts (at night)	26.5%	48.7%
11	A place for reading -English text (at a university library)	35.5 %	42.1 %
12	Access of reading materials -English texts (borrowing from a library)	78.8%	86.8 %
13	After reading interesting materials – make a photocopy	16.7 %	34.2 %
14	Solving reading problems -Take a note then seek for answers from reference books or internet.	13.9 %	38.5 %
15	I think I have not read for academic purposes enough in English.	94.4 %	97.4%

16	A cause of a reading problem relating to question 15 -Resources for the necessary reading materials are not accessible, for example service centres are not open after office hours and so on.	2.8 %	10.5 % (Do not have enough time to use them during office hours)
17	Solving a problem relating to question 15 -Manage time more effectively	8. 6%	36.8%

The overall findings indicated a positive change in learners’ attitudes to and motivation for reading and their reading behaviours. The findings from statements one to three showed that they enjoyed reading more and had a higher level of awareness of its importance. The findings from the remaining questions reflected the way in which the learners had become more conscious of improving their own reading skills. They made attempts to find more time to read more frequently both in Thai and in English for both pleasure and academic purposes. This evidence confirmed hypothesis five: that the intervention successfully helped move the learners towards more self-directed learning.

The findings from many other sources - the improved reading practices at the end of the course (see section 5.2); observation of class reading activities, quizzes and exams; the semi-structured interviews and follow-up studies - also indicated that the implementation of PA techniques had helped improve learners’ attitudes towards reading in general and developed their reading ability, especially with regards to reading authentic technical texts. Indeed, reading ability was indirectly, but consistently improved while the learners moved towards more self-directed learning.

In addition, it was essential to take the learners’ assessment of their own reading ability into consideration. In fact, the findings from the feedback from the course evaluation and semi-structured interviews were in agreement. Almost all of the learners openly stated that

they were more satisfied with and confident about their increased reading ability. They could read a variety of text types, and some were surprised at their own achievement because they had never thought they would be able to read the more technical texts with confidence. At the end of the course, not only could they read for academic purposes but they could also read for pleasure and continued to do so after the course. Further evidence that PA methods had provided a positive impact on reading are the results of the third follow-up study (see section 5.3.5).

Their increased awareness of self-directed language learning was clearly shown in the responses to statements seven, thirteen, fourteen, fifteen and seventeen. These findings were consistent with those presented earlier. Therefore, hypotheses five to six were confirmed.

5.3.2.7 Result of the means differences of all answers of all learners

In order to understand the effect of the intervention as a whole on the learners, an overall comparison of all the learners was made. Each statement was calculated in terms of mean difference (the average difference for all the learners), and standard (how much the differences vary among the learners). A significance level of 0.05 as was used to test whether these mean differences were statistically reliable (or significant) even though the differences for each learner varied. The result of the mean difference of all answers of all learners is presented according to each main part of the questionnaire.

1. Part two: Learners attitudes towards learning English

The only one out of twelve statements whose post score was significantly lower than pre score: 4. *I don't like learning English because learning English is dull.*

2. Part three: Learners' motivation for learning English

There was no statement the post score of which was significantly higher or lower than the pre score.

3. Part four: Learners' attitudes towards self-directed learning

Fourteen out of twenty four (more than half of all) statements showed a high level of statistical significance.

Twelve positive statements having a post score significantly higher than pre score are:

- 4. No English course could teach me all I need to know about language and learning. I have to learn more myself.*
- 5. I always have my own plan to learn English according to my needs.*
- 7. I always set a realistic goal for learning English myself.*
- 8. I always achieve the goal I myself have set for learning English.*
- 10. In the English class, learners can work well together in a small group and only need a teacher occasionally.*
- 13. I always search for more information myself when I cannot understand in class.*
- 14. I prefer to correct my own mistakes.*
- 16. I always find and select the ways of learning which suit me the best both outside and inside the class.*
- 18. In very limited time, I think the best way to improve my English reading ability is to practise reading on my own.*
- 22. I have realised and analysed both good and weak points of my English learning.*
- 23. I always have my own plan for my learning progress.*
- 24. I always ask and assess myself whether and how much I have progressed in my learning.*

Two negative statements having a significantly lower post score than pre score were:

- 19. I hardly read other things apart from what the teacher provides in class.*
- 20. When I encounter any problem or difficulty in learning English, I always give up.*

4. Part five: Learners' preferences for learning styles

Nine out of twenty statements (almost half) revealed a high level of statistical significance.

Four positive statements having a significantly higher post score than pre score were:

- 1. I like to have freedom in choosing what to learn and how to learn.*
- 4. I think it is motivating to have learners assess each other's work in their own groups sometimes.*
- 15. I always have a chance to actively participate in learning activities and the learning process in the English course.*
- 19. I have been trained well enough to be an independent learner in English.*

Five negative having a significantly lower post score than pre score were:

- 5. I have never had a chance to choose interesting materials to read for pleasure in English.*
- 6. I have never had a chance to choose interesting learning activities in English.*
- 8. I have never had an opportunity to choose learning and teaching methods I would like to learn and to use in the English course.*
- 13. I have never had a chance to share decision- making and negotiating with the teacher in the learning process in the English course.*
- 14. I rarely have a chance to express my opinions and real needs in learning English.*

5. Part six: Reading practices in general

Nine out of seventeen statements (more than half) illustrated a high level of statistical significance.

Seven positive statements/questions whose post scores were significantly higher than pre scores are:

- 2. I love reading.*
- 7. I always find time to read interesting materials for pleasure both in Thai and English.*
- 8. Approximately how often do you usually read each of these reading materials?*
 - *Frequency of reading newspapers*
 - *in English*
 - *in Thai*
 - *Frequency of reading journals in English*
 - *Frequency of reading reports*
 - *in English*
 - *in Thai*
 - *Frequency of reading pharmacopoeias*
 - *in English*
 - *in Thai*
- 9. Approximately how long do you spend in reading each type of materials at a time?*
 - *Length of time reading*
 - *journals in Thai*
 - *reports in Thai*
 - *texts in Thai*
 - *pharmacopoeias in Thai*
- 13. If you feel interested in what you read, what do you usually do?*
 - *Make a photocopy*
- 14. If you encounter problems while reading, what kind of solutions do you often generally use?*
 - *Take a note then seek answers from reference books or the internet*

16. *If you think the amount of reading you have done is not enough, what do you think it is the main cause of your problem?*

- *Resources for the necessary reading materials are not accessible, for example service centres are not open after office hours and so on.*

In addition, there were two questions the learners’ answers to which reflected improved attitudes towards self-directedness, because their post scores were significantly lower than the pre scores:

13. *If you feel interested in what you read, what do you usually do?*

- *Discuss it with others.*

17. *If you want to solve your reading problems, how are you going to do so?*

- *Adopt the right attitudes towards reading.*

In conclusion, thirty-three out of the seventy-eight (nearly half of all) statements/questions had post scores that were significantly higher/lower than the pre scores, and a maximum of twelve could be expected by pure chance. This does seem to indicate that the intervention had a beneficial effect on the learners, especially in development of their self-directed learning.

5.3.3 Result of Pre/Post test

The pre test (see section 3.3) was administered at the beginning of the course and the post- test at the end of the course in order to detect whether or not there was an improvement of learner’s reading skills. The result is presented in Table 26.

Table. 26. Result of the pre/post tests

Result of pre/post test	Means	S.D	No. of subjects	t-test	df
Pre	12.6	4.1	39	1.01	38
Post	13.5	4.5	39		

The result of the t-test ($t = 1.01, 38df, p>0.05$) was not significant. However, it was positive.

Though a change in learners' reading improvement was expected, it was unlikely that the learners would become highly proficient in reading in about twenty class-contact hours, taking into consideration their initially poor language level and background knowledge. Nevertheless, there were three main factors that might have influenced this result.

Firstly, although more explanations were given before the tests than in the pilot study, the learners were not familiar with the format of the IELTS test. This could have a negative effect on the results.

Secondly, the post-test was completed after the last presentation of the group-work assignments. The learners were exhausted from preparing for both these presentations and their final exam. Further, it was carried out in the late afternoon after they had attended many lessons. These factors might have affected their performance.

Lastly, but most importantly, though all of the learners took the test, some were not sufficiently motivated to put all of their efforts to do it, because the result did not count towards the grade given for the course. The test was taken on a voluntary basis. The learners' attitude to exams and grades has already been discussed in depth. Some learners had admitted in the last semi-structured interviews that they did not try their best when taking the post-test.

Despite the results of this test, the learner reading skills had improved throughout the course, as could be observed subjectively from the reading activities and objectively from the results of the quizzes and the exams taken during the course. These changes were predominantly for the better. The findings from the qualitative data revealed that the learners felt more confident and satisfied with the obvious improvement in their reading skills. They stated that they could effectively read a variety of authentic texts both for pleasure and study. At the end of the course, no one in this class failed the final exam which some did previously.

The findings from the narrative of qualitative data and the semi-structured interviews consistently mirrored the improvements in the reading skills. It was clear that the learners who participated more actively in the learning process had improved more than the others.

The most apparent cause of this greater involvement was their change in attitude to learning English and self-directed learning and also motivation for learning the language using this new method. This was demonstrated by two mature learners who continued studying in this class. Joining a class of much younger learners who had just finished high school was assumed to be disadvantageous to them, because they had been working for more than ten years before resuming their studies.

One mature learner did not feel at all confident in her reading skills. She was very worried as to whether she would be able to cope, and had expressed this feeling to the teacher/researcher at the beginning of the course. The teacher/researcher gave some advice as to how to prepare and adjust herself to the course. Gradually, her attitudes to and motivation for learning the language changed. She actively participated in the learning process more and more. At the end of the course she was among those learners with the greatest confidence and highest level of success in the course. She achieved a good grade at the end of the course.

Another mature learner was not so successful. His attitude to and motivation for learning the language did not change much or enough to help him become actively involved in the learning process. Although the teacher tried to encourage him to make more effort, he seemed to be very reluctant to do so. For instance, he hid himself within group work. He expressed neither resentment nor enthusiasm for the intervention and did only the minimum amount of work possible. As expected, his reading skills improved only a little. He passed the exam with a borderline score. He was typical of a few learners in this class whose less active participation during the course was reflected in their poor performance.

The majority of the learners were similar to the mature learner in the first example. They started the course with a lack of confidence and uncertain feelings because of their limitations in terms of background knowledge and language ability. Later, with their dynamic active participation in the learning process, their attitude to and motivation for learning the language became more positive and helped them to move forward to be more independent and competent readers. As the course progressed, they thrived, with greater confidence and success. The success of the majority of the learners was the major source of evidence of the positive effect of the study. It could thus be claimed that the intervention did have an effect on the development of the learners' self-directed learning and their reading improvement. Thus, hypotheses five and six were confirmed: that learners became more self-directed to improve their own reading skills.

5.3.4 Results of a summative course evaluation conducted by the Faculty of Humanities and Social Sciences

In the last week of the fourth month before the end of the course, a staff member from the administrative office of the Faculty of Humanities and Social Sciences distributed the same form as used in the pilot study for course evaluation. The forms were collected after the learners had completed them -within ten minutes- in class. 34 (87.18%) learners out of 39 (100%) completed the forms. 74.36% of the respondents stated that they attended about 90% of all lessons. The result of the questionnaire is presented in Table 27.

Table 27. Result of the course evaluation conducted by the faculty of Humanities and Social Sciences.

Item no.	Evaluated aspects	Means	S.D.
1	<i>The teacher clearly states the objectives of each lesson before starting teaching.</i>	4.12	0.591
2	<i>The teacher is always punctual.</i>	4.35	0.646
3	<i>The teacher is always consistent with the timetable.</i>	4.29	0.524
4	<i>The teaching apparently proves the teacher has well prepared each lesson.</i>	4.29	0.629
5	<i>The teacher is capable of teaching in enabling the learners to understand the lesson well.</i>	3.82	0.758
6	<i>The teacher is accessible for learners to consult outside the class.</i>	4.12	0.686
7	<i>The teaching has covered all the main points stated in the syllabus.</i>	3.74	0.666
8	<i>The stated objectives have been achieved.</i>	3.88	0.686
9	<i>The teaching approach promotes learners' creative, critical and analytical thinking process.</i>	4.06	0.694
10	<i>The teacher provides opportunities for learners to actively participate in the learning process through discussion and negotiation.</i>	4.03	0.717
11	<i>The teacher has used teaching materials and aids appropriately for the purpose of each lesson.</i>	3.74	0.618
12	<i>The teacher has employed suitable learning activities for each lesson e.g. using small group work to promote collaborative learning.</i>	3.97	0.797
13	<i>The teacher has employed appropriate methods of assessment.</i>	3.97	0.674
Total no.	Total no.= 13	Overall mean = 4.02	Overall S.D.= 0.664

Note: The criteria for interpretation of the means were:

- 4.50 - 5.00= very good,*
- 3.50 - 4.00 = good,*
- 3.51 2.50 - 3.00 = satisfactory,*
- 3.52 1.50 - 2.00 = unsatisfactory,*
- 3.53 0. 00 - 1.00 = very unsatisfactory*

The overall result of the responses to each statement showed the success of the implementation in meeting the learners’ needs. In particular, findings nine to thirteen reflected the importance of learning activities promoting learner empowerment, which the learners had directly experienced throughout the course. This evaluation was conducted by the authority without any influence from the teacher/researcher. These findings supported those attained by other methods. This result also confirmed hypothesis one: that PA methods enhanced learner centeredness as the needs of the learners were appropriately served.

Additional data from the learners’ comments in the questionnaire are presented within two categories: positive and negative, as in Table 28.

Table 28. Additional information from the learners’ comments

Positive points	Negative points
1. I understand that you have tried your best to teach us but I accept that some of us did not put enough effort into learning. I have tried my best but I know it is not perfect.	1. To avoid a stressful classroom atmosphere, the teacher should not have too high expectations of the learners. We have so many subjects to study apart from English. I hope you understand and accept that we have done our best.
2. There is too little time for us. I wish we had more time to work together so that we could learn more effectively.	
3. I am sorry if we make you feel disappointed. You have done your best but we have done all we could.	
4. Your teaching is good. We are lucky to study with you. You are very dedicated to helping us to be actively involved in the learning process in order to learn better. Although we might not be as good as you expect, we will try our best to improve our ability in the future. Thank you for everything.	

5. You have tried your best to help us to improve our learning. It now depends on us to do it ourselves. I have never been successful in learning English. You have done the right thing. You have tried plenty of alternatives to help us learn. It depends on us whether or not we want to learn. However, I have never felt as successful as this since I started learning English. My scores increased from 30 to 70. More importantly, I can read better. I understand what I read more and I enjoy it. I would like to express my gratitude to you. Thank you very much for your help.	
Total number = 5	Total number = 1

As touched upon previously, the learners’ additional comments were influenced by events in the classroom as they were writing, as can be seen from the teacher’s notes and the video tape recording. The classroom atmosphere had become quite stressful due to the unsuccessful first presentation. The teacher had just given her feedback to the class, expressing her dissatisfaction. There was discussion and negotiation as to how to improve the presentation. Although most of the learners agreed that the learners who presented the first text should present it again, some of them disagreed, but had to accept the votes of the majority. They were worried about the coming final exam such that they were afraid there was not enough time to repeat the exercise. As a result, they took the opportunity to express their negative feelings on these evaluation forms.

The result of the analysis was sent by the university administration to the department and finally to the teacher of each class after the grades had been given to the learners. The result would not affect their grades, but would affect the teacher, since if it was very unsatisfactory, the teacher would be called to discuss it with the head of department or the dean of the faculty. However, the learners in this main study had been familiar with this kind of evaluation throughout the course, so they felt free to say what they wished. Thus, both

aspects of their comments truly reflected their participatory appraisal of their learning process. This was considered to be a positive effect of the intervention on the learners in terms of learner empowerment.

5.3.5 Result of the first and second follow-up studies (six months and one year after the course)

Both the first and the second follow-up studies aimed at investigating the effects of the implementation after the students completed the course and were studying in a higher year (see section 3.4.2.3). The results of these follow-up studies are presented in two sections, according to the two main parts of the questionnaire (see section 5.3.1).

1. The result of the first nine statements including two sub-statements in item eight, representing the change of attitudes to learning English, and to self-directedness, and motivation for learning English and reading skills
2. The result of last statement that required learners to state their three most preferred learning activities or skills/strategies which helped improve self-directedness and three most transferred skills or strategies in their real-life situation

5.3.5.1 Result of the first nine statements

Each individual statement represented a different theme, so was analysed separately. The result of the statistical data is shown in table 29.

Table 29. Result of statistical data of the first and the second follow-up studies

Statements	Means		S.D.		No. of subjects	t-test	df
	1st	2nd	1st	2nd			
1. My attitude towards learning English is... ..positive.	3.6	3.8	0.68	0.68	38	1.944 *	37
2. My feeling about wanting to learn English is... ..positive.	3.4	3.6	0.72	0.72	38	1.845 *	37
3. I feelinterested in learning a language on my own.	3.4	3.8	0.79	0.58	38	2.956***	37
4. After this course, I feel ... ready to improve my English on my own.	3.4	3.5	0.63	0.64	38	0.723	37
5. I feel I like reading...	3.5	3.5	0.56	0.56	38	-0.298	37
6. I feel...more confident in reading English than I did when taking TEP 411 236.	3.3	3.3	0.65	0.69	38	-0.255	37
7. I think my ability in reading English has improved... ..as a result of this course.	3.3	3.7	.75	0.57	38	2.772***	37
8. (a) This course made me think... ..about what I needed to learn.	3.8	3.9	0.53	0.49	38	1.708 *	37
8. (b) This course made me think about what I needed to do in order to learn the language.	3.4	3.6	0.55	0.49	38	2.478 **	37
8. (c) Overall I found the approach in this class resulted in... ..language learning success.	3.3	3.6	0.71	0.54	38	2.438 **	37
9. Now I acceptthat language learning success mainly depends on me and how I co-operate with my teacher and peers.	3.9	4.0	0.61	0.59	38	0 .770	37

Statement1: My attitude towards learning English is.....positive.

The result of the t-test ($t = 1.944, 37df, p<0.1$) was significant. It indicated the improvement of the learners’ attitudes towards learning English after the course. This was strongly supported by the comments the learners provided to support their own responses as shown in Table 30.

Table 30. Learners’ comments to support their responses to statement 1

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<p>-I have never liked learning English before but TEP makes me do so and realize how important it is for my life.</p> <p>-My attitude for learning English is better when I can study on my own without any pressure, especially from grades. I enjoy reading English more.</p> <p>-I have learnt more about how to use English appropriately. I don’t feel bored learning it now.</p> <p>-The course helps me improve my reading and listening a lot.</p> <p>-TEP makes me able to use English practically in daily life. (2)</p> <p>-I have realized that English is very important in my life, especially for my future career. (5)</p> <p>-My attitude to learning English is very positive as I have realized its importance for my studies and I enjoy reading in English more. (6)</p>	<p>-Learning English is not boring as I used to think. (2)</p> <p>-I have never felt like reading textbooks in English before but now I do.</p> <p>-My attitude to learning English is much better because there is no pressure from grades now.</p> <p>-I have learnt how to use the language more appropriately and better. It also makes me feel that learning English is not dull but interesting.</p> <p>-I am confident that I can read much better.</p> <p>-At present, I need to read every day, if I had not taken TEP, I would not have been able to understand English texts as I do now.</p> <p>-English is essential for my current studies. (6)</p> <p>-I have realized the importance of English both for my studies and international communication. (2)</p> <p>-The better I can read, the more I feel like learning English.</p> <p>-I can use English in my real situation.</p>

General comments in 1 st study	General comments in 2 nd study
<p>-My attitude to learning English is not better or worse. It is the same. It is just average. (2)</p> <p>-My attitude to learning English is average because I hardly use it in my daily life especially speaking. I still read more in Thai. (2)</p> <p>- I don't need to take English courses any more, and this makes me feel less enthusiastic in learning English.</p> <p>-I am not good at English and neither is my grade good so my attitude to learning the language is just average.</p>	<p>-My grade is not very good. I still feel my English is not good.</p> <p>-My attitude toward English is average but I am ready to take another English course if necessary.</p>

(Note: The number in parentheses is the number of the responses.)

Statement 2: My feeling about wanting to learn English is.....positive.

The result of the t-test ($t = 1.845$, 37df, $p < 0.1$) was significant. It indicated the improvement of the learners' motivation for learning English after the course, as largely supported by the learners' comments as shown in Table 31.

Table 31. Learners' comments to supports their responses for statement 2

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<p>-I am much more interested in learning English and I read much more in it as it is an international language for modern world-communication. (7)</p> <p>-I am interested in learning English much more as I need to use it in every subject. (5)</p> <p>-The more I feel confident in my language ability, the more I need to improve it. (2)</p>	<p>-I felt much more interested in learning English especially for speaking. I really want to be able to speak English fluently. (2)</p> <p>-I always liked learning English but I like it more now.</p> <p>-I have realized more that English is essential for worldwide communication.</p> <p>-I am interested in reading journal articles more and also in speaking.</p> <p>-I enjoy reading more and I can read much better.</p> <p>-I enjoy reading and listening in English more not only for study but also for pleasure. (2)</p> <p>-I need to pay more interest in English because it is required more in higher years of study. (3)</p> <p>-I focus more on learning on my own as there are no further English courses.</p>

General comments in 1 st study	General comments in 2 nd study
<p>-It depends. If it is interesting, I feel more motivated to learn it. (3)</p> <p>-My grade in English has never been good which makes me not very interested in learning it but I know its importance, as I need to use it more and more.</p> <p>-I do not have as much time for English as in TEP 411 236 (2).</p>	<p>-I don't have the time that I had in TEP 411 236.</p> <p>-I would like to learn another language like German because there are many people who are good at English, so I want to be good at other languages.</p> <p>-If I have a choice, I will read in Thai. I read in English if necessary.</p> <p>-My grade is not good and it makes me feel discouraged, so I do not feel like learning English much. However, I have realized that English is necessary for my current and future studies.</p> <p>-I feel less interested in learning English because I use it less than in TEP 411 236 and there is no more encouragement from the teacher and motivation in terms of grades.</p>

Statement 3: I feelinterested in learning a language on my own.

The result of the t-test ($t = 2.956, 38df, p < 0.01$) was the most significant of all, indicating that the attitudes towards self-directed learning changed dramatically and positively after the course, as supported by the learners' comments presented in Table 32.

Table 32. Learners' comments to support their responses to statement 3

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<p>-TEP411 236 helps me realize the importance of English more so I am more motivated to learn it on my own. (12)</p> <p>-I have started reading more of my texts in English in all subjects. (2)</p> <p>-I feel I can be more successful in learning the language myself than when relying on others.</p>	<p>-I have realized that I have to be responsible for my learning rather than relying on others.</p> <p>-I need to use English for my current study every day. (4)</p> <p>-Pharmaceutical advances are rapid. It is essential to develop reading skills to keep abreast with these changes.</p> <p>-I really want to improve my reading skill and also speaking and listening skills as much as I can for real and effective communication with English speaking people. (2)</p> <p>-I have realized I can be more successful in learning English on my own rather than relying on other people.</p> <p>-English is necessary and important for my present and future needs. (2)</p> <p>-The more I read, the more I enlarge my vocabulary.</p> <p>-I have realized I need to improve my language ability on my own more because of my poor English background knowledge. -If I had more time, I would learn English more because it is necessary for worldwide communication.</p>
General comments in 1 st study	General comments in 2 nd study
<p>-I think I still need some guidance and support from the teacher sometimes.</p> <p>-I do not have as much time to focus on English as in TEP 411 236. (4)</p> <p>-There is no more motivation from grades, so I feel less interested in learning English.</p>	<p>-I have become very busy with other main subjects and I do not have as much time to focus on English as in TEP 411 236</p> <p>-Without any pressure from grades, I have no real motivation to learn English on my own.</p>

Statement 4: After this course, I feel ... ready to improve my English on my own.

The result of the t-test ($t = 0.723$, $38df$, $p > 0.05$) was not significant, but was positive. It could be said that some learners were not confident enough to accept that they were ready to learn on their own. Many possible reasons for this result have been presented (see section no. 5.3.2.5), including some of the learners' own comments, as displayed in Table 33.

Table 33. Learners' comments to supports their responses for statement 4

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<p>-I am ready to learn English on my own more because I would like to improve it and I think I can do it better after taking TEP. (2)</p> <p>-TEP makes me feel more confident and ready to learn English on my own though I don't have much time. I know how to learn by myself much more now. (2)</p> <p>-It is necessary to learn on my own because English is needed more and more in higher years of study, especially reading skills. (6)</p>	<p>-I am more aware of self-directed learning and I have actually started doing it. (2)</p> <p>-TEP 411 236 makes me feel more confident in using English. Though I do not have much time for learning it now, I know how to learn on my own. (2)</p> <p>-I need to develop my reading ability to cope with more English assignments in all subjects or in what I am really interested in.(4)</p> <p>-I have been practicing reading English continuously since TEP 411 236.</p>
General comments in 1 st study	General comments in 2 nd study
<p>-I am not sure whether I am ready to successfully learn on my own. However, if I have to do it, I think I can.</p> <p>-I have not been as skilful in self-directed learning as I wished. (4)</p> <p>-There is no time to focus on English like in TEP 411 236. (3)</p> <p>-I have tried to manage my time to learn English on my own but I do not seem to have been very successful. I do not have enough time and motivation as I did in TEP 411 236.</p>	<p>-I feel less motivated to learn the language on my own especially after TEP 411 236. It seems that there is no immediate need to use English and no encouragement from the teacher. (2)</p> <p>-I wish I could force myself to be more active to learn English by. I have not been satisfied with my language ability.</p> <p>-I am not very confident in self-directed learning. This might be because my English background knowledge is not very good. (3)</p>

Statement 5: I feel I like reading...

The result of the t-test ($t = -0.298$, 38df, $p > 0.05$) was not significant, but indicated a decline in the learners' motivation for reading English. This may have been due to lack of time and the absence of the immediate need to use the language, as well as real motivation for reading: that is, for passing an exam, as demonstrated in the comments presented in table 34.

Table 34. Learners' comments to supports their responses for statement 5

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<ul style="list-style-type: none"> -I enjoy reading in English much more than before. (6) -I like reading more and I feel more motivated to improve it. (4) -I like reading more but mainly in my specialist field of study. (2) 	<ul style="list-style-type: none"> -I have been trying to practise reading more and I feel I can read better. -There are more interesting things to read in English both in terms of information and the language itself. (2) -I know it is useful to be able to read in English effectively. -It is necessary to read in English more in the higher years or sometimes I am interested in reading it myself. -I enjoy practicing reading medical patient leaflets, drug labels and journal articles more. -I enjoy reading more, if the text is not too difficult. -I quite like reading in English but not very much. I will read it when it is necessary.
General comments in 1 st study	General comments in 2 nd study
<ul style="list-style-type: none"> -It depends. If it is not difficult, I like reading but if it is, I don't like reading it. (3) -I still feel that I don't like reading in English though I know it is important. I will read only when it is necessary. (2) -There is no spare time to enjoy reading as much as in TEP 411 236. 	<ul style="list-style-type: none"> -I have less time to focus on English as in TEP 411 236 -I feel like reading if it is interesting. (2) -I read in English when it is necessary or if I am really interested in the texts. (4)

Statement 6: I feelmore confident in reading English than I did when taking TEP 411 236.

The result of the t-test ($t = -0.255$, 38df, $p > 0.05$) was not significant. It indicated a decline in the learners' motivation for reading English. The main reasons for this may have been the same as those mentioned in the previous section, and as presented in Table 35.

Table 35. Learners' comments to supports their responses for statement 6

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<p>-I feel more confident in reading especially in my specialist field of study. (4)</p> <p>-TEP 411 236 has prepared me for reading long journal articles so well that I am not scared to read them but feel quite confident. (5)</p> <p>-I can read much better and reading is the only language skill I am interested in. I feel much more confident in reading than in other skills.</p>	<p>-As reading in English is required more in my current studies, I can understand what I read much better and I do not need to look up many words in a dictionary as in the past.</p> <p>-I feel more confident in reading English because I gained more background knowledge and reading strategies in TEP 411 236. This helps me develop my reading ability more. I feel more patient in reading or enjoy reading more.</p> <p>-I can read assigned texts in all main subjects much better and I read pharmacopoeias more effectively. (4)</p> <p>-I can use what I learnt in TEP 411 236 in my real situation.</p>
General comments in 1 st study	General comments in 2 nd study
<p>-I am not very confident in reading English. Sometimes I can understand what I read well but other times I cannot. (6)</p> <p>-I am not yet very good at English.</p> <p>-Though I am not confident in reading, I think I can do it.</p>	<p>-Sometimes I cannot understand what I read though I think I have learnt how to read quite adequately.</p> <p>-I am not confident in pronunciation as we hardly ever read aloud or practised speaking. (2)</p> <p>-There is a lot of vocabulary, especially technical terms, that I do not understand.</p> <p>-Though I can read better, I am not very confident in my reading skill.</p> <p>-I still feel I am not very good at English. (3)</p> <p>-I can read but I will read when I have time or if it is necessary.</p> <p>-I feel less enthusiastic and less confident in English because I am not taking any English course and I use it less than in TEP 411 236.</p>

Statement 7: I think my ability in reading English has improved.....as a result of this course.

The result of the t-test ($t = 2.772$, $38df$, $p < 0.01$) was significant. It indicated the increased confidence gained from their reading improvement as a result of the intervention. This was strongly supported by their comments shown in Table 36.

Table 36. Learners' comments to supports their responses for statement 7

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<p>-I am more confident in my reading because I read much more but I use a dictionary less frequently.</p> <p>-I do not find reading in English difficult to deal with as I did before. I spend less time in reading a text but with more understanding. (4)</p> <p>-I think my reading ability has improved to some extent.</p> <p>-I do not feel scared to read long English texts as before. I can read better and I do not find it as difficult as I did.</p>	<p>-TEP 411 236 helps me improve my reading ability with a variety of techniques and strategies learnt in class such as reading for specific ideas and for summary. (2)</p> <p>-TEP 411 236 helps me improve my reading skill as well as my listening skill.</p> <p>-I have gained more confidence in reading through TEP 411 236 because I have practised more and learnt more techniques and strategies to deal with it.</p> <p>-TEP 411 236 helps me to improve my reading ability but it is necessary to continue developing it. (3)</p> <p>-I can deal with a variety of reading materials much better now. (3)</p> <p>-TEP 411 236 helps me to realize how much I need to improve my language ability on my own especially to make up for my poor language background knowledge.</p>
General comments in 1 st study	General comments in 2 nd study
<p>-I think my reading ability is average because sometimes I can understand well but other times I cannot. (5)</p> <p>-I feel less interested in reading than I was in TEP 411 236, as I need to use it less.</p> <p>-The more I read, the more I realize that I need to improve my reading ability more and more.</p> <p>-I still find the complicated sentence structures difficult.</p> <p>-I read in English only when it is necessary.</p>	<p>-After TEP 411 236, I have no real motivation to read. As I read less, I feel less confident.</p>

Statement 8a: This course mad me think ... about what I needed to do in order to learn the language.

The result of the t-test ($t = 1.708$, $38df$, $p < 0.1$) was significant. It indicated the learners' increased awareness of their target situation needs as the positive effect of the intervention.

This is supported by their own comments in Table 37.

Table 37. Learners' comments to supports their responses for statement 8a

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<ul style="list-style-type: none"> -TEP 411 236 is useful to help me realize my own needs better. (8) -TEP 411 236 makes me realize the importance of English more and the need to improve it myself. (9) -TEP 411 236 helps me improve my reading ability. (4) 	<ul style="list-style-type: none"> -TEP 411 236 helps me to realize my target needs. -TEP 411 236 helps me to improve not only reading skills but also other language skills that are good for effective communication. -TEP 411 236 is very practical because I can learn by myself better. (3) -TEP 411 236 helps me understand how to cope with difficult problems in reading English.
General comments in 1 st study	General comments in 2 nd study
	<ul style="list-style-type: none"> -I would have learnt much better in TEP 411 236 if I had had enough background knowledge as I do now. -I don't know exactly what is the best way for me to learn. It keeps changing with my situation. -What I have realized now is that I need to use English more.

Statement 8b: This course made me think ... about what I needed to do in order to learn the language.

The result of the t-test ($t = 2.478$, $38df$, $p < 0.01$) was significant, and indicated the learners' increased awareness of their learning needs as the positive effect of the intervention. This can be seen in the comments presented in Table 38.

Table 38. Learners' comments to supports their responses for statement 8b

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<ul style="list-style-type: none"> -TEP 411 236 helps me to be more aware of my learning needs. (10) -TEP 411 236 helps me develop my critical thinking. -I accept that it is my own responsibility to become successful in language learning. 	<ul style="list-style-type: none"> -TEP 411 236 helps me to realise my learning needs much more (3) -TEP 411 236 helps me to know how to be successful in learning the language and I have achieved it. -TEP 411 236 helps me to learn better but I still need to improve a lot more on my own. (2) -TEP 411 236 makes me more patient in reading through reading strategies such as setting purposes in reading and these can be applied to reading in a real-life situation. -TEP 411 236 helps me become a more independent learner.
General comments in 1 st study	General comments in 2 nd study
<ul style="list-style-type: none"> -Though I have realized the need to improve my language ability, sometimes I am not highly motivated enough (or feel too lazy) to do so. 	<ul style="list-style-type: none"> -I think learners need to help themselves first.

Statement 8c: Overall I found the approach in this class resulted inlanguage learning success.

The result of the t-test ($t = 2.438$, 38df, $p < 0.01$) was significant. It indicated the learners' increased confidence in their language learning success as the positive effect of the intervention. Their comments are presented in Table 39.

Table 39. Learners' comments to supports their responses for statement 8c

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<ul style="list-style-type: none"> -I like this way of learning because it enable me to read much better and I enjoy reading much more. -I like this way of learning because I can do in myself later. (3) -I have seen the progress in my reading ability since taking TEP 411 236 (3). -TEP 411 236 makes me feel much more confident in myself that I can learn it and use it successfully. 	<ul style="list-style-type: none"> -I know how to guess the meanings from the contextual clues if I cannot find their meanings in a dictionary. -The techniques and strategies learnt in TEP 411 236 enable me to learn on my own more effectively. (2) -TEP 411 236 helps me feel more successful in learning English. (2) -TEP 411 236 helps me to become a more self-directed learner. -When I do the learning myself, it makes me feel more confident that I have actually been successful in learning the language with my own efforts.
General comments in 1 st study	General comments in 2 nd study
<ul style="list-style-type: none"> -I have not put all of my efforts into learning English so my success is just average. (2) -I am not sure whether I am very successful in using it or not but I think I have used English more after the course. -I feel not very successful in learning - English because I still find reading difficult. (2) 	<ul style="list-style-type: none"> -I do not use English much in my daily life except for my study. -At present, the need to use English is much less than that in TEP 411 236.

Statement 9: Now I accept ...that language learning success mainly depends on me and how I co-operate with my teacher.

The result of the t-test ($t = .770$, $38df$, $p > 0.05$) was not significant, but was positive. Many factors might have affected this result, for instance, classroom culture (see section 5.3.2.5). More importantly, it should be noted that the learners needed more practice in learning in a self-directed manner to gain more confidence in so doing. This can be clearly seen in their comments, as presented in Table 40.

Table 40. Learners' comments to supports their responses for statement 9

Comments for positive responses in 1 st study	Comments for positive responses in 2 nd study
<ul style="list-style-type: none"> -I have realized that I need to be more responsible for my learning so that I can use it in my real situation. (5) -TEP 411 236 has prepared me well for self-directedness. (2) -I feel more successful in learning in this way. (3) -I accept that to undertake the learning process myself is the best way to develop my language learning. (4) 	<ul style="list-style-type: none"> -TEP 411 236 helps me to find the most appropriate way to develop my own language leaning. -I believe that it is me who needs to do the learning myself to improve my own language ability. If I don't, I will not be successful no matter how well the teacher teaches. -My language learning success depends on my own efforts. (4) -TEP 411 236 helps me how to enlarge my vocabulary more effectively. -It is necessary to continue practicing my own language skills to develop them more and more. TEP 411 236 helps me feel more confident in my reading ability and this makes me feel more successful in learning on my own. (2) -I have gained more knowledge by this method of learning. -I like interactive learning like this because it makes me feel more confident in communicating with others and it is more enjoyable. (6)
<p>General comments in 1st study</p> <ul style="list-style-type: none"> -Whether I like it or not, it is essential to do the learning by myself to improve my language skill. 	<p>No general comments in 2nd study</p>

The findings of the first and second follow up studies indicated the positive effect of the implementation of PA methods on learner improvement, especially on self-directed learning. They gained a greater sense of success and thus confidence in their language learning through self-directedness. Their attitudes towards language learning in general also improved; they accepted that they were more aware of their target situation and learning needs.

However, motivation declined after the course. As clearly seen in the learners' comments, they did not have enough spare time to focus on learning English, as they became busier with their specialist subjects. More importantly, they lacked both the immediate need for English use and encouragement to pursue their learning as enthusiastically as they did during the course. The learners started using English more in their fourth year. This leads to the third follow-up study (see section 5.3.6).

5.3.5.2 Result of statement ten:

Statement 10 required the learners to state their preferred strategies or skills which had helped them learn better during the course and also those that they used most frequently at the time of the assessment. The themes of the data analysis were based on the learners preferred strategies or skills and frequency of use. These are presented in five categories in Table 41.

Table 41. Learners' preferred strategies and skills most frequently transferred after the course (Note: The number in parentheses is the number of responses.)

The findings from the first follow up study: six months after the course		The findings from the second follow- up study: one year after the course	
Preferred skills	Transferred skills	Preferred skills	Transferred skills
I. Reading skills 1. Reading for main ideas and conclusion (20) 2. Reading for specific ideas (10) 3. Reading with purposes: A. Reading for pleasure e.g. newspapers, magazines, short stories and others (12) B. Reading for academic purposes e.g. journal articles, professional reports, texts, pharmacopoeias, drug labels and advertisements, medical leaflets, manuals and others (20)	I. Reading skills 1. Reading for main ideas and conclusion (22) 2. Reading for specific ideas (15) 3. Reading with purposes: A. Reading for academic purposes e.g. journal articles, professional reports, texts, pharmacopoeias, drug labels and advertisements, medical leaflets, manuals and others, especially strategies to deal with journal articles (28) B. Reading for pleasure e.g. newspapers, magazines, short stories and others (18)	I. Reading skills 1. Reading for main ideas and conclusion (24) 2. Reading for specific ideas (20) 3. Reading with purposes A. Reading for pleasure e.g. newspapers, magazines, short stories and others (16) B. Reading for academic purposes e.g. journal articles, professional reports, texts, pharmacopoeias, drug labels and advertisements, medical leaflets, manuals and others, especially how to read journal articles (26) C. Critical and analytical reading (4)	I. Reading skills 1. Reading for main ideas and conclusion (31) 2. Reading for specific ideas (18) 3. Reading with purposes A. Reading for academic purposes e.g. journal articles, professional reports, texts, pharmacopoeias, drug labels and advertisements, medical leaflets, manuals and others especially strategies to read journal articles (25) B. Critical and analytical reading (5) C. Reading for pleasure e.g. newspapers, magazines, short stories and others (20)

II. Study skills <ol style="list-style-type: none"> 1. Group work discussion (12) 2. Group work presentation (10) 3. Managing self-directed learning e.g. setting goal for learning (20) 	II. Study skills <ol style="list-style-type: none"> 1. Managing self-directed learning e.g. setting a goal for learning and practising language skills through watching movies and TV and listening to radio in English, using internet or e-mail in English (25) 2. Group discussion (12) 3. Group presentation (15) 	II. Study skills <ol style="list-style-type: none"> 1. Group work discussion (16) 2. Group work presentation (14) 3. 3. Managing self-directed learning e.g. setting goal for learning (15) 	II. Study skills <ol style="list-style-type: none"> 1. Managing self-directed learning e.g. setting a purpose reading and a goal for learning and practising language skills through watching movies and TV and listening to radio in English, using internet or e-mail in English (29) 2. Group work discussion (17) 3. Group work presentation (15)
III. Grammatical structures <ol style="list-style-type: none"> 1. Identifying a core of complex sentences (16) 2. Identifying sentence markers (12) 	III. Grammatical structures <ol style="list-style-type: none"> 1. Identifying a core of complex sentences (20) 2. Identifying sentence markers (15) 	III. Grammatical structures <ol style="list-style-type: none"> 1. Identifying a core of complex sentences (20) 2. Identifying sentence markers (15) 	III. Grammatical structures <ol style="list-style-type: none"> 1. Identifying a core of complex sentences (22) 2. Identifying sentence markers (15)
IV. Vocabulary skills <ol style="list-style-type: none"> 1. Guessing meaning from the contextual clues (17) 2. Expanding vocabulary with its collocation (15) 	IV. Vocabulary skills <ol style="list-style-type: none"> 1. Guessing meaning from the contextual clues (20) 2. Expanding vocabulary with its collocation (20) 	IV. Vocabulary skills <ol style="list-style-type: none"> 1. Guessing meaning from the contextual clues (22) 2. Expanding vocabulary with its collocation (18) 	IV. Vocabulary skills <ol style="list-style-type: none"> 1. Guessing meaning from the contextual clues (28) 2. Expanding vocabulary with its collocation (20)
V. Integrated language skills <ol style="list-style-type: none"> 1. Using English as a means of instruction in class (12) 2. Integrating other skills e.g. speaking, listening and writing within reading class (11) 	V. Integrated language skills <p>Practising other skills e.g. speaking, listening and writing as much as possible (18)</p>	V. Integrated language skills <ol style="list-style-type: none"> 1. 1.Using English as a means of instruction in class (14) 2. 2.Practising other skills e.g. speaking, listening and writing within reading class (15) 	

These findings indicated that the learners felt they had acquired the necessary learning strategies and reading skills during the course and successfully transferred them to their real-life situations. The preferred skills and strategies for self-directed learning during the course were similar to those used frequently for genuine communication in the target situation. However, some of their priorities had changed in the transfer stage. For example, the learners preferred reading for pleasure to reading for academic purposes during the course but they later read for pleasure. Similarly, as the learners needed to use English more in their higher year of study, their highest priority in terms of study skills was the transferring of the managing of self-directed learning, focussing upon reading strategies -mostly for real communication- with other related skills such as those related to vocabulary and grammatical structures. Interestingly, they approved of study skills such as group discussion and presentation. Many learners stated that these skills were very helpful for preparing them to deal with their group-work assignments in their specific subjects. Most of the learners clearly demonstrated their preferences in terms of the four integrated language skills, especially speaking and listening. This resulted in the use of these transferred skills in the target situation, where they tried to grasp as many opportunities as possible to develop these skills, especially speaking to English-speaking people. Some of them stated that they felt more confident in expressing themselves in writing after learning vocabulary using collocation, and used critical and analytical reading skills for genuine communication.

In short, the findings highlighted that there were many activities undertaken during the course that the learners enjoyed and found practically useful and which later they could transfer for use in their real situation. These findings indicated the learners' greater development towards self-directed learning after the course. The

obvious example from the findings was that the learners continued reading for pleasure and developing their speaking and listening skills while they still had to read for academic purposes more on their own. This finding also confirmed the research hypothesis and research question that the implementation of PA methods successfully moved the learners to become more self-directed.

5.3.6 Result of the third follow-up study: eighteen months after the course

The result of the structured interview that comprised the third follow-up study is presented in Table 42.

Table 42. Result of the third follow up study

Interview questions	Answers	Results
<i>Q 1. Do you read English more this year?</i>	Yes = 33	(86.84%)
	No = 5	(13.15%)
<i>Q 2. Do you think the technical English course is useful for your own reading?</i>	Yes = 35	(92.11%)
	No = 2	(5.26%)
Total = 38	Total =38	Total= 100%

The findings showed that the majority of the learners read more in their fourth year in order to complete assignments. Almost everyone questioned found the course useful for improving their reading skills through self-directed learning. This is supported by the findings presented earlier, and which confirms the research hypothesis and research question that that the learners became more self-directed and were able to improve their own reading skills as the result of the implementation of PA methods.

5.4 Summary of all the findings

Out of both qualitative data and six sets of quantitative data, the results of the second and follow-up studies gave a mixed appreciation of the effects of using PA methods. In respect of learning and perception of motivation to learn, the conclusions were not significant and sometimes negative. One explanation for this may lie in the lack of support after the course, as suggested in section 6.3 part IV. For example, questions 4, 5, 6 and 9 asked about their readiness to improve their reading on their own, their motivation for reading, their confidence on their reading and success in language learning whose answers indicated the decline in these areas after the course. The negative response to this may reflect of limited learning time devoted to the overall activity.

The most positive aspect of study lay in how the methods facilitated the students' advance towards self-directed learning. Thus, responses to questions 3, 7, 8a, b and c. showed how the course help develop their self-directed learning which they counted as a success in language learning.

In considering the results of the quantitative study overall, we should also remember that they are often at odds with those obtained from the qualitative data obtained by the PA methods themselves, not to mention the teachers' own observation of the students' progress. Putting aside the inevitable influence of the participant observer (or teacher's) wishful thinking, we should not forget that Thai students may feel they should underrate their own progress out of a cultural sense of modesty. Additionally, when students are asked to measure their progress along matrices there will always be some uncertainty as to where they are positioning their concept of progress. The cohort are bright University students who are used to academic success, a success which they can often quantify themselves in improved examination results.

Asking them to evaluate their own progress in the somewhat less easily quantifiable attribute of language may become a more random process, one that is qualified by their disappointment at not completing a course with complete knowledge. This said, we have to accept that the clearest positive result came only in the study's core area, the march towards learner independence. This is in itself a progress that will not have an immediately quantifiable consequence in language learning. It is a consequence that will hold them in good stead, however, during their future contacts with English technical texts.

All in all, the findings from each source of data supported the others in confirming the research hypotheses and research questions. PA methods -used as the innovative instrument for ongoing learner-based needs analysis- enhanced learner centredness with a negotiated syllabus. Within this a shift towards learner centeredness, learner training and learner involvement occurred simultaneously, bringing to the learners an improved attitudes towards and motivation for learning English and also towards self-directedness. This in turn enabled the learners to become more self-directed and to improve their reading skills.

5.5 Summary of the main study

Although the methods and stages of the main study were similar to those of the pilot study, there were three major differences between the two.

Firstly, the main study focused on one class of learners in order to investigate the effects of the intervention in more detail, while the pilot study covered three classes.

Secondly, the main study took longer, due to the three follow-up studies, which examined the real impact of the intervention on the learners in the target situation.

Thirdly, the main study employed more methods of quantitative data collection to detect the effect of the intervention in depth.

All the outcomes indicated that the main study had successfully achieved its aim.

Chapter 6: Summary, Conclusions, Implications and Recommendations

Introduction

This chapter provides a summary and the conclusions of the research study and discusses its implications, resultant recommendations and limitations of the research study.

The summary is drawn from the findings and analyses in chapters four and five, focusing on the effect of the implementation of PA methods on the learners' attitudes towards, and motivation for learning English as well as their attitudes towards self-directedness and the development of their self-directed learning and the improvement of their reading skills.

The implications and recommendations for learners, teachers, faculties, the department of Foreign Languages, the University, the Ministry of Education and the teaching of ESP are also made to help improve reading courses in similar situations.

Thirdly, suggestions for future research are offered.

Finally, limitations of the research study are provided.

6.1 Summary of the research study

The research was designed as a case study to investigate the effect of the implementation of PA methods on learners' development. Four main areas were discussed:

- 1) attitude to learning English
- 2) motivation for learning
- 3) ability to engage in self-directed learning

4) reading skills

To achieve this, PA methods were used as the innovative instruments for ongoing learner-based needs analysis to enhance learner centeredness within the classroom context. The classroom context was that of a reading skills class for second year pharmacy students.

The study began with an objective needs analysis to provide a basis for a pre-syllabus that realised official curriculum objectives and established the type of course materials that would be required.

The second phase was the implementation of PA methods through action research. The research instruments for collecting both qualitative and quantitative data were: participant classroom observation; pre/post questionnaires; pre/post tests; semi-structured interviews; course evaluation forms; and three follow-up studies conducted six months, one year and eighteen months after the course finished.

The research study was conducted twice, first as a pilot then as the main study. The pilot study in 1999 tested the proposed PA methods with three classes of learners. Its findings showed the positive effects of the intervention on the learners' development, especially their attitudes towards self-directed learning. The main study was carried out a year later with a different group of learners. The findings of the main study were consistent with those of the pilot study. It was found that PA methods had effectively enhanced learner centeredness, helping develop positive attitudes and greater motivation among the learners towards learning English and self-directedness, as well as improving their reading skills.

6.1.1 Issues arising from the results of the research study

With respect to the findings mentioned above, three interrelated issues arising from the research study are:

6.1.1.1 *The teacher as a main agent for change*

Since the study was carried out as an action research, it was obvious that the teacher was a main agent of change. She acted as an innovator who brought about change with the cooperation of the learners. The teacher took the role of a model for the learners in terms of attitude, motivation, sense of self-directedness and language ability through her enthusiasm for learning the language and improving her reading skills. This was demonstrated by the teacher choosing interesting materials and methodology, and justifying these choices in terms of the learners' needs. She guided them to gradually take responsibility for these choices themselves through the negotiation process. (All the above, however, is of no use if the learners do not from the start possess the *willingness* to at least try to adopt the processes suggested by the teacher.)

6.1.1.2 *Quality involvement*

The findings of both studies indicated the quality of the learners' involvement in the process i.e., a wide range of cognitive and affective attributes, including greater willingness, resulting in their learning and personal development, as a result of the implementation of PA methods. These findings also demonstrated the improved interaction and collaboration between students and with the teacher, effected through the nature of the negotiations that took place. At the same time, the learners took charge of their own studies, taking advantage of the opportunities and resources provided by the project. PA methods helped to create the right environment to

encourage the learners to become more involved in the learning process and to take increased responsibility for their own learning.

6.1.1.3 PA effect on sustainable self-directedness leads to learner autonomy

The findings of the pilot study reported in chapter four are consonant with those of main study in chapter five: that PA methods enhanced learner-centeredness by promoting learner empowerment helping them to become more independent. This was achieved by using PA methods to reveal the group's learning needs as they evolved throughout the course as the learners were encouraged to take responsibility for their own learning experience, so that it would continue long after the training workshop or course has ended. The learners' potential for autonomy is fully acknowledged in this study. The process contributed to the development of the learners' positive attitudes, which included self-confidence and self-esteem as a language learner, which helped, promoted their self-directed learning and improved their reading ability.

Learner empowerment as the ultimate goal of learner centredness by means of language education was successfully achieved by the implementation of PA methods. The learners were able to pursue their learning goals with greater self-directedness that gradually developed into autonomous learning, as revealed in the findings of the follow-up studies. This specific finding seems to indicate that learner autonomy can be achieved even in the face of cultural barriers and that learners can be helped to develop it through the right training process, regardless of culture differences.

6.1.2 Problems arising from implementation of PA methods

The problems that arose from the implementation were discovered by means of the many sources of information utilised in the study.

6.1.2.1 *Problems concerning the learners:*

- It was difficult for some learners who had not previously experienced self-directed learning to adjust themselves within the time.

Misunderstanding the purpose of using the methods involved caused some frustration and resentment. It was therefore essential to clearly explain the aim of the use of the methods involved.

- The learners had to work hard to achieve the goals set by the teacher within the course requirements. It was essential for them to understand this fully. Their attitudes towards and motivation for achieving their goals played a crucial role. It was not easy to convince some to work much harder through active involvement in the learning process, especially since this would not count towards their course grade.

Learners needed both psychological and methodological preparation.

Their attitudes towards and motivation for their language study and attitudes towards self-directedness were crucial factors in developing self-directed learning. These needed to be developed while attempting to help the learners become self-directed, as success depended wholly on their own willingness and readiness.

6.1.2.2 Problems concerning the teacher

The teacher had to work harder to meet the changing needs of the learners throughout the course. She needed to prepare more materials to cater for the learners' changing needs, as ongoing needs analysis showed. More choices meant more time and effort.

The teacher had to adjust her attitude and personality to the learners' needs. She also needed to be versatile and take different roles as innovator, facilitator, and learning counsellor, in order to help the learners successfully achieve their goals. Psychological and methodological preparation was necessary in order to undertake the different roles needed in this situation. Learner empowerment was promoted, rather than the authoritarian teaching that is the national norm. The teacher-dominated method is a one-way process relying only on teacher-dependency, and at first it was difficult to strike a balance between the traditional and the new in order to make the course work effectively.

These problems could be addressed by thorough preparation -both psychological and methodological- for both teacher and learners. The learners would ultimately welcome the implementation of PA methods, as we have seen confirmed from several different sources.

6.2 Conclusions

In the light of the findings presented in chapters four and five, summarised above, a number of conclusions can be drawn: However, two major constraints on the scope of these conclusions have to be recorded.

First of all, the study is exploratory in nature, representing an attempt to solve a language-learning problem in TEP 411 236 by helping develop learners' self-directedness so that they could improve their reading skills. This study has revealed

factors that appear to influence learning in TEP 411 236 in the context of the unique Thai classroom culture. Also, the fact that the results are drawn from a case study through action research conducted in an ESP course at university level might limit the extent to which the conclusions can be generalized. With the two main reservations mentioned above in mind, the following conclusions can legitimately be reached.

In this case study each of the seven adapted PA methods used enhanced learner centredness to a greater or lesser degree.

The methods of Transect walk, Cause and Effects helped particularly to raise the learners' awareness of their target situation and learning needs. The learners' potential to contribute meaningfully to the shaping of their own learning, both during and after the course, was recognised in this study. The learners appeared to enjoy learning English and became more interested in learning to improve their language skills on their own as they had an opportunities to express their needs through Brainstorming, which led to discussion and negotiation and ongoing needs analysis. This resulted in the improvement of their attitudes to and motivation for language learning.

Daily Schedule and Mapping predominantly helped them manage more easily their own study in planning, monitoring and evaluating it. Well-Being Ranking and Matrix Scores of Priorities enabled the learners to achieve a greater sense of success and gain more confidence and self-esteem as a language learner by giving them an increased awareness of their own language ability, especially with regards to reading skills.

All seven adapted methods greatly changed their attitudes towards self-directed learning for the better through learner empowerment. They became more independent and more competent. The findings of the follow-up studies indicated the

sustained development of their greater self-directedness that would lead to their sustaining their language improvement through their own endeavours. All of changes recorded were predominantly in the direction that positively responded to all six research questions in section 3.1.5.

Despite the two major reservations mentioned above, the findings of the research study provide insight into how to help learners in similar situations develop their language learning in a self-directed manner through the attempt to enhance learner centredness in a limited time and with a pre-determined syllabus. This is especially valuable for teachers, who need to change from a traditional to a more responsive way of teaching in order to involve learners so that they could achieve greater independence and competency. The fact that the findings revealed how the contributory factors affected the development of the learners' self-directed learning and reading skills, including how to deal with them in the teaching and learning process, will hopefully enlighten those teachers wanting to test this method in their own classes. In addition, the implementation of PA methods affects both the teachers and the learners. The former are able to enhance their own self-development through the process of reflection on their teaching methods and the latter find it easier to develop their self-directed learning and thus improve their own language learning. Thus, it is expected that the results of this research study will be widely beneficial for all parties involved in educational development, especially those interested in quality of learning.

6.3 Implications and recommendations

Two types of implications are considered and presented in this section:

- 1) Those arising from the research study and leading to the recommendations made
- 2) Those arising from these recommendations

The implications and recommendations drawn from the findings of this study are divided into seven categories: the implications and recommendations for:

1. learners;
2. teachers;
3. the faculty of Pharmaceutical Sciences;
4. the faculty of Humanities and Social Sciences and the Department of Foreign Languages;
5. Khon Kaen University;
6. the Ministry of Education
7. the teaching of English for Specific Purposes

I. Implications and recommendations for learners

Implication one: Participatory appraisal can help develop learners' attitudes to and motivation for language learning.

Recommendation one: As many participants as possible should be offered opportunities to express their own needs and become actively involved in the learning process and their own appraisal through heightened awareness of their own needs.

The constraints of the course and its lack of formal learning opportunities means that the process of addressing the learners' needs has to take account of how to promote their ability to study independently.

Implication two: PA can have an indirect and beneficial impact on reading skills by raising students' awareness of how to manage the independent study essential to their success.

Recommendation two: Using a PA approach can help learners to identify what they must do to improve their reading. This approach can therefore have a positive indirect impact on reading skills

Implication three: Learners like to have reassurance as to their progress.

Recommendation three: Class directed learning should provide this. Whilst the learners are encouraged to take responsibility for their own learning, so that it continues long after the course, the teacher should create an appropriate classroom environment by providing frequent feedback to improve their attitudes towards and motivation for directing their own learning.

For example, the English teacher could provide some guidelines on how the learners could check their progress by setting their own goals for reading. These goals should be set for a certain length of time -a month or a term- and the learners should be able to judge how to what extent their goals have been achieved. The teacher needs to cooperate or collaborate with those subject teachers who require learners to read in English. They could then help each other to follow up the progress of the learners.

Implications of the recommendations for the learners:

Learners need both psychological and methodological preparation at an early educational level in order to help raise their awareness of their abilities and potential for self-direction. The learners will also need regular support in these areas.

Learners need to be shown how to self-appraise, but equally they need to have the tools to select appropriate reading materials in order to improve their reading level.

When they are working independently, they need regular encouragement and monitoring.

However, it is unrealistic to expect progress without further support. The course that gave rise to this study is *only* given to second year students. Ideally, at the beginning of succeeding years, learners should be given the option to:

- a. attend the self-access centre to undertake a planned programme; or
- b. make an outline programme for reading the assigned course material under the supervision of a teacher.

Both these options would require the learners to draw up a programme for the semester in four separate monthly sections. They would have to agree to work as hard as possible to complete the programme. They would need access to a teacher for a minimum of one hour per month to monitor progress or redefine goals.

II. Implications and recommendations for the teachers

Implication one: PA techniques are by their nature subject-centred. In a learning environment they defer to the learner's exploration of their own abilities and experiences.

Recommendation one: The teacher's role must change and the teacher-centred model must be modified. This means that the teacher has to be flexible and responsive to learners' needs, requiring a change from being an authoritative figure to becoming a facilitator whilst helping to change the learner's role from that of a receiver to that of a contributor to the learning process. This could be achieved through negotiation, as Naidu, Neeraja, Shivakumar and Viswanatha (1996: 218) point out in comparing the differences between 'the teacher-fronted lecture mode and the teacher-fronted interactive mode'. They say that the latter promotes three levels of the learners'

negotiation: 'negotiation with the text, with peers and with the teacher- [which] converts classroom activities to communicative process'. They conclude that learners' interests, knowledge, levels of competence and limitations are acknowledged within these processes and therefore the scope of interaction is broadened.

Just like the learners, the teacher has subjective needs and perceptions of the classroom. In other words, both have their personal agendas with regard to behaviours and beliefs about language teaching/learning, and the interaction of these will inform the learning process. The teacher must be prepared to negotiate, and any action initiated should lead to learner development, as 'language is not usually an outcome of formal teaching. Instead it comes from a process of self-development through experience' (Pretty et al.: 1995: 1). Thus, the teachers need to develop the qualities of flexibility that they expect from their learners.

Implication two: PA methods help create a learning environment suitable for developing self-directed learning.

Recommendation two: The learners need to be shown how to work in small groups through brain- storming discussion, negotiation and decision-making, with regular opportunities to evaluate the course and their own learning. The goal of creating the right environment for learning should be integrated into the presentation of tasks and the teaching and assessment methods throughout the course. One cannot assume appropriate learner behaviour among any group of learners; and it was clear that within the project's national and institutional context students set out with a very poor grasp of how to shape their learning experiences as a set of group interactions between peers or between an individual and the appropriate learning materials.

Implication three: In-service training is needed to prepare teachers for new roles.

Recommendation three. In the project's context, it was clear both from staff room comments, the process of peer collaboration and from personal observation that the staff would not be able to cope with an unstructured introduction of this method. Extensive training would be necessary, not only in relation to PA methodology, but also in how best to deal with it. After group induction, training could be managed by collaborative or team teaching, peer observations and related activities or discussions. One possibility would be for teachers to incorporate peers into the PA process, giving them a role that was not simply facilitative but part of an exploration of a wider configuration of needs.

Implication four: Action research should be promoted for teachers' professional development.

Recommendation four: Action research does not benefit only the learners but also the teachers. Teachers need to be self-critical and self-reflective about how to make the best use of the learners' potential in developing their own learning. Teachers should be encouraged and supported to undertake action research in their classes whenever possible.

Implications of the recommendations for teachers

As was mentioned earlier, the implications for the teacher are immense.

Firstly, they need to change their classroom practice from the teacher-fronted lecture mode to the teacher-fronted interactive mode in order to encourage learner involvement in all forms of learning activities. How can they be persuaded to change? People do not change just because other people tell them to. It is possible to argue that innovation is a necessary part of the educational process. A practical way to initiate change is to ask the learners to give their opinions of a certain course (as the learners

in this study were asked to do), and to say how they would develop their ability to undertake self-appraisal, to work independently, to improve their reading skills and to develop their own programme of work.

In introducing any change, Hutchinson and Hutchinson (1996: 315) point out, security underpinning the need for structure and visibility is the most essential prerequisite. They summarise four conditions for smooth and effective change suggested by Marris (1986), Blackler and Shimmin (1984):

1. Only a certain amount of change can be accommodated at any one time. The individual's network of meanings has to be given time to take new ideas and experiences on board.
2. Adjusting to change takes time and energy. To make the adjustment, therefore, individuals need relief from other pressures, and constant reassurance and support.
3. To reduce feelings of insecurity, people need as complete a picture as possible of what the change will look like in practice.
4. Individuals find it difficult to carry the burden of change alone. The support of a group helps individuals by sharing the burden. As a general rule, groups are more inclined to take risks than individuals (Handy 1985: 155) because they feel more secure through their mutual support for each other regardless of culture.

All of these are very important for the teacher to consider while initiating any classroom innovation.

Secondly, these teachers need to be prepared to take part in team teaching, collaborative teaching and action research. In addition, during their in-service course (s) they will need to experience the kind of learning situation they are going to

recreate for their learners. So, the teachers need to see and discuss examples of team-teaching, with regards to which it is best to ask the teachers to identify or comment on specific points rather than make general comments, to avoid difficulties. Essential aspects of group work such as establishing the nature of a task, checking that all participants understand, identifying the outcome etc. should be experienced by teachers who are going to use grouping in their own classes. They can be helped to identify what can go wrong in group work, maybe by watching a video of group work going badly wrong (this should not be taken from real teaching but should be acted out by a group of students with a clearly defined notion of what they are doing).

Thirdly, teachers should be encouraged to carry out small pieces of action research, co-ordinated on a departmental basis, so that pieces of research can be shared to everyone's benefit.

Furthermore, if teachers are to undertake a supporting role during those semesters in which the learners are making their own programmes for reading in English, then the hours involved will have to be timetabled as part of their teaching commitment. Clearly the organisational and financial implications of such a programme of teacher development are considerable.

III. Implications and recommendations for the Faculty of Pharmaceutical Sciences

Implication one: Collaboration between the subject teacher and the English teacher is essential for solving learners' language problems.

Recommendation one: There should be closer cooperation between subject teachers and the English teacher with regards to the nature and requirements of assignments so that the latter can prepare lessons to help the learners cope with these better. In this way, both parties can help each other to solve the learners' problems effectively.

Implication two: TEP 411 236 needs to be offered at the right time.

Recommendation two: The course should be taught not in the first semester of the second year but in the second semester of the third or the first semester of the fourth year, once learners have enough background knowledge in their field of study and more importantly greater awareness of their real needs for using English for their academic and professional purposes, as the tasks in these higher years require English most.

Implications of the recommendations for the Faculty of Pharmaceutical Sciences

There should be a forum involving subject teachers and the English teacher in order to establish how best to help the learners cope with their assignments in pharmacy, which should not be too demanding in terms of time and ability. For instance, tasks should be graded and background knowledge should be strengthened by some kind of special support. The teaching in pharmacy subjects should also focus on promoting and preparing the learners for self-directed learning.

IV. Implications and recommendations for the Faculty of Humanities and Social Science and the Department of Foreign Languages

Implication one: Before taking this target course, learners need to be well prepared by the foundation courses in both language skills and self-directed learning.

Recommendation one: The two English foundation courses in the first year for the learners in health sciences, as well as the self-access learning centres, should prepare the learners well enough, both in terms of language skills and self-directed learning to take a their final English course TEP 411 236. There are several ways in which to achieve this.

Firstly, the materials used should be authentic so that the learners can deal with them not only in another English course but also in their real situation. Secondly, reading materials should be relevant to their field of study in order to interest and stimulate them to put in more effort. Thirdly, the learners should be adequately trained for learning in a self-directed manner both in class and in self-access learning centres. To become self-directed, learners do not only need to know how to do so, but also, and more importantly, they need opportunities to practise or directly experience self directedness in the learning process. As Aston (1996: 284) points out: 'if we believe that the chief responsibility for initiating and shaping the language learning process rests with the teacher as the learner's chief source of knowledge and about the target language, we are likely to think of self-instruction as an alternative to instruction by a teacher and of self-access systems as a form of teachers-substitute'. Fourthly, the tasks assigned in both the class and the self-access learning centres should promote self-directed learning, e.g. by providing opportunities for the learners to make their own decisions as to materials and by promoting self-assessment. Fifthly, there should be opportunities for the learners to expose themselves to real English communication both in class and in self-access learning centres, especially listening and speaking: their most wanted skills, on an operational basis.

Implication two: Responsive teaching should be promoted in the department.

Recommendation two: A project on staff development focusing on the quality of teaching through responsive teaching should be promoted by the department. The shift from traditional to responsive teaching is difficult, especially when most other teachers still use the traditional methods. Thus, those who wish to make the change should be supported by both in-service and pre-service training to improve their knowledge and skills as relevant to these new methods. The most feasible way to do

this is would be through collaboration among teachers of the same course. This can be achieved by setting up in- service training through collaborative action that would help staff to develop their own teaching whilst improving their attitudes to an innovative teaching method. More importantly, its success is expected to have a positive impact on colleagues' attitudes to this innovation. That is, it will help create the right environment to effectively implement responsive teaching for most of the teachers in the same institute as transfer training especially for non-native language teachers, as the most difficult part of pre-service teacher training in general. Britten (1996: 167) pointed out that year after year many teachers use the same traditional teaching methods as their own former teachers present colleagues. He concludes that 'this problem can be dealt with only if, during training, the acquisition of skills goes hand in hand with the acquisition of appropriate attitudes to teacher development. This is necessary because attitudes command skills. You may know how and when something ought to be done, but you still may never actually do it if you do not feel inclined to, if you feel no personal commitment to working that way' (ibid.). However, change in attitudes needs to be supported by the right environment, as mentioned above.

Implication three: Follow up study should be encouraged after the course.

Recommendation three: To improve teaching and learning, the department should encourage and support the teachers to follow up their learners from the end of the course until graduation, by regularly allowing the teachers extra time to do so, perhaps once a month. In this way, the teacher can act as a counsellor for the learners and so come to see the real problems the learners encounter, especially in transferring to their real-life situation the knowledge and skills learnt on the course. This will

permit the teacher not only to provide the right sort of guidance or support when they need it but also to gain insight into how best to develop the course.

Implication four: Systematic learner training in the self-access learning centres should be promoted to prepare learners for effective self-directed learning.

Recommendation four: A systematic training process should be offered to the learners, especially in the foundation courses, to prepare them for learning effectively in a self-directed manner.

Firstly, the teacher should be trained in how to help the learners to achieve this goal. Secondly, relevant materials in terms of authenticity and interest should be supplied in the centres. Thirdly, there should be systematic and regular feedback on progress in the language skills of the learners who frequently use the centres for developing their self-directed learning; this would also give guidance as to how the centres might be improved in order to serve the needs of the learners as effectively as possible.

Implications of the recommendations for the Faculty of Humanities and Social Science and the Department of Foreign Languages

The department is aware of the need to have self-access learning centres to comply with the policy of the Ministry of Education, which promotes self-directedness at primary and secondary levels. If the promotion of self-directed learning becomes part of the policy of the department and faculty, they should invest more in teacher development and the self-access language centres. Firstly, there should be a regular forum in which the teachers can learn from each other or from the guest speakers who they invite to share their teaching experiences or research studies. Secondly, the budget for up-grading materials and learner training should be utilised in order to hire qualified staff who can take responsibility for these functions and

provide necessary consultancy for the learners to make best use of the centres (Dickinson 1987). Further, the findings of the research study of Darasawang (2000: 266) on developing learner autonomy through the use of self-access learning indicated that ‘the self-access learning centres would work as a support for learner autonomy when the students have hands-on experiences in using it’. She suggested a practical way to familiarise the learners with the centres and encourage them to use them more would be to integrate class activities with assignments together with necessary guidelines to work in the centres as a resource. Thus, the purpose of using the centres would be achieved, because they ‘provide an environment with a variety of machines and materials that users can exploit, and some kind of catalogue and advisory service to help them do so, such centres can offer a wider and more flexible range of opportunities for language use than is possible in most classrooms. In so far as the individual is free to choose the activities to carry out and the time to dedicate to them, learning is self-directed and autonomy is encouraged’ (Aston 1996).

V. Implications and recommendations for Khon Kaen University

Implication one: Self-directed learning needs to be promoted in all subjects studied in the university.

Recommendation one: The university should promote and support self-directed learning and encourage staff to use it in class; it should also provide extra hours for practising it in all subjects at all levels. In this way, the learners’ self-directed learning will be reinforced and accelerated during their university career. This development will continue long after they graduate and is assumed to be an invaluable experience not only in language learning, but also in dealing with other aspects of their lives, as the conception of learning involved is based on a distinctive view of the human condition as presented by Freire (1974: 3): ‘to be human is to engage in relationships

with others and with the world. It is to experience the world as an objective reality, independent of one-self, capable of being known’.

To this end, the university should take the results of the course evaluation into greater consideration for the improvement of the quality of teaching and learning both within and outside of the curriculum. To help learners gain access to facilities to support their self-directed learning, they should extend the service hours of the libraries, computer centres and self-access learning centres. As learners have to attend lessons during normal office hours, the extension would mean they could use the facilities as much and for as long as they needed. In addition, facilities such as computers and relevant reading materials are needed to assist learners to develop their self-directed learning.

Implication two: More English courses for developing language skills other than reading skills should be provided in the higher years of study.

Recommendation two: There should be more optional English courses in higher years, focusing on serving the learners real academic, professional and personal needs. Thus, the courses offered for the learners to choose from according to their needs, and without credit requirements, should focus on specific skills such as reading English journal articles, practising listening and speaking for the presentation of papers or seminars, and writing medical reports or articles, or even practising reading/listening/speaking purely for pleasure. This could sustain learners’ motivation for learning English throughout their university studies.

Implementations of the recommendations for the university:

The most feasible suggestion is to separate the two English foundation courses into different years, i.e. the first and the second, while at the same time incorporating the technical English course for each field of study into the third year so that the

learners have a chance to study English for at least three years. In this way, their motivation for learning the language is sustained long enough for them to understand the true academic and professional purposes of learning the language. Their increased motivation will assist the development of their self-directed learning.

VI. Implications and recommendations for the Ministry of Education

Implication one: Implementation of learner centeredness to promote self-directed learning needs to be reinforced at all levels.

Recommendation one: There should be an effective evaluation and follow-up system to assess the implementation of learner centeredness and self-directed learners. This should be included in the National Education Policy and Curriculum and teacher training; the Ministry of Education has already promoted it in all subjects at primary and secondary level (see section 4.1.1.6.3). This could help reinforce the development of the implementation of learner centredness and prepare learners to improve their self-directedness at all levels.

Implication two: The promotion of literacy needs to be reinforced at all levels.

Reading for pleasure should be promoted at all levels in both Thai and English.

The learners in the study said they did not like reading because they could not read efficiently.

Implication of recommendation for the government:

The government should:

- control the price of reading materials so that parents and the learners themselves can afford or get access to them easily
- invest more on materials in public libraries for every age group

- promote children books, e.g. by supporting writers for young readers

VII. Implications and recommendations for teaching ESP

Implication: Ongoing needs analysis is essential for responsive teaching in ESP.

Recommendation: Needs analysis, especially ongoing subjective needs analysis, is crucial for responsive teaching in ESP. Needs analysis in a learner-centred framework requires negotiation to help the learners better understand their goals in order to achieve them, whilst at the same time revealing their learning needs. Thus, an ESP course design requires ongoing adjustment to cater for the changing needs of the learners in each situation, since by its nature it is often ‘much more of an ongoing process than a one-off product’ (Waters 1994:10). This entails the need for locally designed materials to suit learners’ needs in their local situation. As each class is unique, global solutions may not always be applicable to their specific local problems. However, detailed solutions to local problems take a lot of time and expertise to formulate.

Also, ongoing needs analysis is useful for general English learning, since people usually learn a language with some aim in mind, such as acquiring some grammatical knowledge or even passing an exam.

In conclusion, all of the recommendations given are desirable educationally and socially, although financially some constraints would be encountered. However, every teaching and learning situation takes place with its limitation to some degree. That is why there is an attempt to make the best out of its constraints.

6.4. Suggestions for further research

To train students to become self-directed learners takes a long time because of its complicated stages. This research study represents a preliminary step towards further research aimed at developing learners' self-directedness so that they can improve their language learning on their own after the course. In order to investigate the progress of their self-directed learning, future research should be closely focused on follow up studies undertaken after the course until the learners graduate or even into their professional life. Thus, the research should be completed as a longitudinal research study in order to see whether or not the students could become much more self-directed or even fully autonomous learners. This research might also focus on different language skills such as listening, speaking and writing. In addition, if it focuses on the comparison between the learners who have been taught by this method and those who have not, it would provide further and more confident explanations of the benefits of implementing a participatory appraisal approach in enhancing learner centredness to promote self-directed learning for language learning improvement.

6.5 The Limitations of the research study

This research study has been designed as a case study, in the form of classroom-based action research, to investigate in depth the effects of the implementation of the chosen PA methods, which have been used as a needs analysis instrument for learner-based needs analysis in order to enhance a learner- centred approach and to promote learner empowerment and greater independence. The three main limitations in undertaking the research study were as follows:

1. The research both in the pilot and the main studies was carried out in a classroom-based learning context within TEP 411 236, whose syllabus was

pre-determined by the university. Although the aim was to move the learners forward so that they could participate in the creation of a negotiated syllabus as far as possible, this was done within the scope of the preset syllabus. Thus although the learners were known to prefer to improve their speaking and listening skills as according to their immediate needs or wants, the teacher had nevertheless to also meet the requirements of the course e.g. while retaining a focus upon the reading skills, trying also to integrate speaking and listening skills within this overall focus in order to reduce any potential unfavourable effect on the outcome of the intervention. However, this limitation may well have affected the potentially fuller scope for a negotiated syllabus because of the resulting time restrictions. .

2. A comparison study between the two groups of learners, viz. the control group without the implementation of PA methods and the experimental group with the intervention by the same teacher, was not possible in the target situation. Firstly, the university requires identical treatment of all learners taking the same course. Secondly, ethically the teacher should not deprive the learners of the opportunity to learn what is required in order to achieve their educational goal. Thus there is very limited scope available within the prescribed time and educational requirements to put the methodology of the intervention of PA methods into practice. This may have limited the potential benefits, and evidence of the intervention on the learners' achievement to some extent.
3. Due to the limitation of the time scale of the doctoral study, it was not possible to follow up the learners until graduation. Moreover, close

observation of the learners in the transferring of what they had learnt in the course was not possible due to the distance between the UK and Thailand. These conditions might have limited some evidence of the learners' progress to some extent.

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Appendix 1. Summary of the results of the 1997 needs analysis

The results were considered to be valid for course pre-design in this research project because it was carried out only one year before the research project by the same researcher as a part of her MA study at the University of Edinburgh in 1997 to lead to a revision of TEP 411 236 with an attempt to help the learners to improve reading skills through extensive reading.

The questionnaire consists of two main parts: general information with regards to the subjects and then their needs, which were revealed through six main questions. The respondents were asked to tick their preferences; more than one tick was acceptable.

I. Results of the questionnaires

206 (82.4%) out of 250 questionnaires were returned from 168 (81.95%) learners, 27 (89.99%) subject teachers, 11(55%) local pharmacists. On average they had studied English for ten years.

The results were presented in the form of the top three priorities of all responses to each question based on their frequency to justify their needs as shown in table 1.

Table 1. Summary of the results of the 1997 needs analysis questionnaire

No. of questions	Main findings	No. of responses	Percentages
<i>1. What is your main purpose for reading English?</i>	<i>-To keep abreast of all the latest development in pharmaceutical field</i>	163	25.47%,
		159	24.84%,
	<i>-For current university study</i>	151	23.54%
	<i>-For future work or profession advance</i>		
<i>2. What type of texts do you need to read most?</i>	<i>-Pharmacopoeias or pharmaceutical data sheets</i>	122	21.96%
		103	18.54%
	<i>-Articles from pharmaceutical journals</i>	98	17.64%
	<i>-Textbooks</i>		

3. What topics do you need to read most?	-Topic directly related to pharmacy e.g. drug discoveries	149	40.23%
	-General health science topics	146	39.42%
	-General topics	75	20.25%
4. Which type of learning activities do you prefer most?	-Being lectured by teacher	134	44.22%
	- Pair or small group work	109	35.97%
	-Self- directed learning	57	18.81%
5 Which other language skill apart from reading do you think is most useful for your study and your work?	-Speaking	161	42.38%
	-Listening	132	34.11%
	-Writing	91	23.51%
6. Which of the following best expresses your opinion about including extensive reading in this course?	-Useful	85	41.26%
	-Very useful	79	38.35%
	-Quite useful	36	17.48%

The findings indicated that English was most needed for academic and professional advancement resulting in their most needed text type and topics as shown above. Most of the learners preferred being lectured to being self-directed due to the familiarity with the teacher centred model with grammar translation method.

II. Results from the semi-structured interviews

There were three sets of results from: learners, subject teachers and pharmacists.

I. Learners' results

A. Language skills and text types

Reading is the most needed skill especially for higher years of study in order to read pharmaceutical texts and journals especially the sub-skill of reading for gist but with accurate and adequate comprehension e.g. if the reading task given was to describe the exact process of drug production or combination, the learners were

required to search from a variety of references in English. The learners suggested the use of authentic reading materials, a variety of texts, journal articles or reports that the learners would encounter when undertaking projects in their higher years.

B. Problems in learning to read English

The learners said they had no opportunities for practicing independent reading in the curriculum and no learning background which would help them to develop their skills through independent study. Thus, a teaching method promoting active involvement in the learning process was essential to solve this problem. Their attitude to and motivation for learning English in general was not positive because of the undesirable experiences in learning the language. The learners had not experienced a sense of success in learning English in spite of many years of studying it. I assume this is because of uninteresting and ineffective teaching and learning methodology and unsuitable materials. Although most of the students recognized the importance of learning English, many of them had developed a negative attitude towards English, expressing a distinct dislike of English and making it clear that they were only doing the course because it was compulsory, a requirement of their training. They had little interest in learning English though they knew they needed to use it for current study and future work.

C. Their expectation for TEP 411 236

Most of the learners expressed a desire to be able to learn at their own pace and according to their own interests as they rarely had an opportunity to do so. They wanted to actively participate in the learning process, they preferred learning experiences with more interaction and more personal involvement. The learning styles they had experienced in the teacher centeredness - grammatical translation method did not help them to develop skills for independent study. The learners relied on mainly

English-Thai dictionaries to help translating their texts word by word so the use of a monolingual dictionary was suggested to alleviate the problem of misinterpreting texts but they would need training in the use of a monolingual dictionary. They also felt that teaching methods were an important factor in motivating those students whose English was weak. The methodology should allow the learners to learn at their own pace based on their own needs.

D. Suggestions

The learners suggested how to make the course more interesting and effective and how to motivate them to learn. They expected a variety of modern authentic materials with an interesting, interactive and effective methodology to interest them. To counter lack of motivation, they recommended a greater use of visual and audio-visual aids, more opportunities for involvement in learning processes, more emphasis by the teacher on facilitating the learners' performance development and less emphasis on testing. In this way, they expected to be more able to move towards becoming more competent and independent learners.

II. Subject teachers' results

The subject teachers had similar views to the learners that reading was the main skill for dealing with assignments in their subjects in higher years. Most references to drugs in the literature are in English texts such as pharmaceutical technology and pharmaceutical journals. They said the learners could not read English effectively as they frequently misinterpreted texts so they stressed that the course must address the real needs of the learners. The learners should be trained to use specific reading skills needed in their target situation such as reading for main ideas and for summary. More importantly, they should be trained to learn to read in a self-directed manner so that they could transfer their skills into their real situation.

III. Pharmacists' results

Similarly, the summary of the results of the pharmacists was that reading was the main skill needed to read drug labels, instructions and medical inserts, journal articles and drug literatures especially pharmacopoeia. They suggested the English course should prepare learners to be able to read authentic texts and equip them with necessary reading skills to cope with their target needs both for studying in higher year or higher degree and for profession. They suggested more training on reading in a self-directed manner to solve the reading problem, just as the students and subject teachers had done.

Appendix 2. Questions in the initial needs analysis questionnaire

I. Please enter your response in the following blanks.

- a. Sex:
- b. Age : ... years
- c. Year of study..... majoring in....
- e. Number of years of studying English

II. Please circle the number that represents your preferences for each question.

There are six rating scales:

- 1 = Strongly disagree,
- 2 = Disagree
- 3 = Rather disagree
- 4 = Rather agree
- 5 = Agree
- 6 = Strongly agree

1. What is your main purpose for reading English?
 - a) For current university study
 - b) For professional advances
 - c) For further study or higher degree
 - d) For training and/ or employment abroad
 - e) For pleasure or personal contact
 - f) Other (please specify)
2. What type of texts do you need to read most?
 - a) Authentic reading materials
 - b) Adapted reading materials
 - c) Texts used in your subject matters
 - d) Commercial language teaching materials
 - e) Pharmacopoeias
 - f) Newspapers and medical leaflets or novel.
 - g) Other (please specify)
3. What type of text do you find most difficult to read?
 - a) Authentic reading materials
 - b) Adapted reading materials
 - c) Texts used in your subject matters
 - d) Commercial language teaching materials
 - e) Pharmacopoeias
 - f) Newspapers and medical leaflets or novels.
 - g) Other (please specify)
4. What topics do you need to read most?
 - a) Topics directly related to pharmacy e.g. drug discovery
 - b) Topics in general health sciences
 - c) General topics
 - d) Only topics taught in subject matters
 - e) Other (please specify)

5. Which language skill do you need most for your current study and your future work?
 - a) Reading skill
 - b) Writing skill
 - c) Listening skill
 - d) Speaking skill
6. Which language skill do you need to improve most?
 - a) Reading skill
 - b) Writing skill
 - c) Listening skill
 - d) Speaking skill
7. Which language of instruction do you think will most benefit your learning?
 - a) Thai only
 - b) English only
 - c) More Thai than English
 - d) More English than Thai
 - e) An equal amount of both languages
 - f) Other (please specify)
8. Which learning styles do you like most?
 - a) Self-directed study with teacher's guidance
 - b) Small group work
 - c) Pair work
 - d) Translating by teacher
 - e) Other (please specify)
9. Which learning activities do you like most?
 - a) Read aloud
 - b) Read silently and do exercises individually
 - c) Read silently and exchange information in a small group
 - d) Read silently and exchange information in pairs
 - e) Reading silently for problem solving
 - f) Reading silently for presentation
 - g) Other (please specify)
10. Which makes your reading most difficult?
 - a) General vocabulary
 - b) Technical terms
 - c) Sentence structures
 - d) Grammatical rules
 - e) Background knowledge on a certain subjects
 - f) Reading strategies
 - g) Other (please specify)

11. Which reading technique do you use most frequently?
 - a) Translating word by word using a bilingual dictionary
 - b) Skimming or reading for gist
 - c) Scanning or reading for specific information
 - d) Guessing from headlines or illustrations
 - e) Guessing from contextual clues
 - f) Interpretation
 - g) Inference
 - h) Separating facts from opinions
 - i) Other (please specify)
12. Which reading technique do you find most difficult?
 - a. Translating word by word using a bilingual dictionary
 - b. Skimming or reading for gist
 - c. Scanning or reading for specific information
 - d. Guessing from headlines or illustrations
 - e. Guessing from contextual clues
 - f. Interpretation
 - g. Inference
 - h. Separating facts from opinions
 - i. Other (please specify)
13. Which technique do you think will help improve your reading most?
 - a. Learners do the reading themselves with teacher's guidance
 - b. Teacher provides reading materials for extensive reading.
 - c. Reading skill is integrated with other skills through audio and visual aids e.g. internet or video.
 - d. Reading is done through various forms of leaning activities e.g. pairs or group work or class presentation.
 - e. Learners share decision making in choosing materials and learning activities.
 - f. Other (please specify)
14. Who is the most important factor in reading improvement?
 - a. A learner himself/herself
 - b. A teacher
 - c. Both of them
 - d. Teaching and learning facilities such as a language laboratory and a library
 - e. Other (please specify)
15. What is your opinion on the English courses offered for Pharmacy students?
 - a. Only three existing courses e.g. two foundations courses in the first year and the Technical English course in the second year are enough.
 - b. Those three existing courses should in a different year from the first year to the third year.
 - c. There should be an English course in every year from the first to fifth year.
 - d. In addition to the existing three English courses, there should be other English courses focusing on other skills such as speaking, listening and writing courses in the third, fourth and fifth year.
 - e. Other (please specify)

Appendix 3. Main questions for semi-structured interview for the initial needs analysis

A. Questions for learners

- 1. Do you like reading?*
- 2. How did you learn to read English?*
- 3. Are you familiar with self-directed learning?*
- 4. Are you really interested in learning English? Why or Why not?*
- 5. What do you expect from this English course?*
- 6. Is it easy to find English materials to improve your English? Do you have much time to improve it?*
- 7. Do you think you have enough background knowledge for reading technical texts?*

B. Questions for subject teachers

- 1. What do you think is the learners' main English problem?*
- 2. What is your expectation from TEP 411 236 in relation to the learners' needs?*
- 3. What is your suggestion for improving the course?*

Appendix 4. Questionnaires for ongoing learner-based needs analysis in pilot study

I. A lesson evaluation form

1. What I like:.....

2. What I don't like:.....

Suggestions:.....

II. A weekly journal form

1. What did you actually do with the assignments?

2. How do you feel about it?

3. What did you do to improve English on your own this week?

4. What do you plan to do next for your self-directed learning?

Suggestions:.....

Appendix 5. Main questions for semi-structured interview during the course**Part A: Pilot study**

1. *What do you think is the cause of your problem/success in adjusting?*
2. *How are you going to solve it?*
3. *What can the teacher help you to solve this problem?*
4. *What can you do to help yourself?*

Part B: Main study

1. *What do you think is the cause of your problem/success in adjusting?*
2. *How are you going to solve this problem?*
3. *What can the teacher help you to solve this problem?*
4. *What can you do to help yourself?*

Appendix 6. Questions for semi- structured interview at the end of the course**Part A: Pilot study**

1. *Does this course help you to learn on your own better? Why/Why not?*
2. *Does the course help you to read better? Why/ Why not?*
3. *Do you feel confident to learn to read on your own? Why/ Why not?*
4. *Do you like learning English more? Why/Why not?*
5. *Will you take another English course if it is offered? Why/Why not?*

Part B: Main study

1. *Has your attitude toward learning English changed? In which direction?*
Why/Why not?
2. *Has your motivation to learn English improved? Why/Why not?*
3. *Has your attitude toward self-directed learning changed? Why/Why not?*
4. *Do you feel more confident in reading? Why/ Why not?*
5. *Do you think you can learn better on your own? Why/Why not?*

Appendix 7. Main parts of the pre/post questionnaire

Part one is about general information about the learners and numbers of years in learning English.

Part two is about the attitudes towards learning English with twelve statements:

- 1) *I like learning English because learning English is enjoyable.*
- 2) *I like learning English more than the other subjects because knowing English makes me feel more confident.*
- 3) *I think it is a waste of time to study English because I cannot use it well enough although I have been studying it for many years.*
- 4) *I don't like learning English because learning English is dull.*
- 5) *I like learning English because learning English is an interesting and useful experience.*
- 6) *I think English is useful for all especially in view of globalization where we can communicate with each other quickly around the world.*
- 7) *I think English is a very important part of my degree study.*
- 8) *I think English plays a prominent part in business, social and personal contacts.*
- 9) *I like English because English is easy to learn.*
- 10) *I don't like English because English is hard to learn.*
- 11) *English is not only for highly educated persons but also for all to help survive better in this modern world.*
- 12) *English is the language most used for communication on the internet at the present time.*

Part three is about learners' motivation for learning English with fourteen statements:

- 1) *I want to learn English so that I can read English texts and professional articles in English that will help my study.*
- 2) *I like to learn English so that I can keep abreast of world events.*
- 3) *I like to learn English so that I can keep abreast of the latest research in my discipline.*
- 4) *I seize all opportunities to improve my English skills both inside and outside the class.*
- 5) *I always want to know more than a teacher teaches in class.*
- 6) *I feel overwhelmed by the difficulty of learning English.*
- 7) *English is very difficult to learn so that I just want to pass an exam.*
- 8) *After I have passed my exam, I will be glad to forget about English forever.*
- 9) *If there is no further English course offered, I will still continue learning English on my own.*

- 10) *I want to learn English so that I can understand and take part in global economics better.*
- 11) *I want to learn English because I would like to have a chance to further my study abroad.*
- 12) *I want to learn English because I would like to have an opportunity to work or live abroad.*
- 13) *I want to learn English because I would like to have a chance to work in multi-national companies or international organizations*
- 14) *I want to learn English for my professional advancement.*

Part four is about the learners' attitude towards self- directedness with twenty- four statements.

- 1) *I think success in learning is mostly attributable to my own efforts.*
- 2) *I have to learn myself. My teacher cannot learn for me. He or she is only assisting me in my learning.*
- 3) *I can only learn English in class or from my textbook.*
- 4) *No English course could teach me all I need to know about language and learning. I have to learn more myself.*
- 5) *I always have my own plan to learn English according to my needs.*
- 6) *As we all have different ways of learning, I prefer my own way of learning.*
- 7) *I always set a realistic goal for learning English myself.*
- 8) *I always achieve the goal I have set for learning English.*
- 9) *In the English class, a teacher should focus on showing learners how they can learn rather than teaching only content.*
- 10) *In the English class, learners can work well together in a small group and only need a teacher occasionally*
- 11) *I like a teacher who is strict with everything I have done about learning English.*
- 12) *I like the teacher to correct all mistakes I have made.*
- 13) *I always search for more information myself when I could not understand in the class.*
- 14) *I prefer to correct my own mistakes.*
- 15) *I always find other and various sources of information outside the class.*
- 16) *I always find and select the ways of learning which suit me the best both outside and inside the classroom.*
- 17) *The ultimate goal in my learning is to be able to be an independent learner or to be able to learn on my own effectively.*
- 18) *In a very limited time, I think the best way to improve my English reading ability is to practise reading on my own.*
- 19) *I hardly read other things apart from what the teacher provides in the class.*
- 20) *When I encounter any problem or difficulty in learning English, I always give up.*
- 21) *The more I learn English, the more I expect help from the teacher.*
- 22) *I always know and analyze both good and weak points of my learning English.*
- 23) *I always have my own plan for my learning progress.*
- 24) *I always ask myself and assess whether and how much I have progressed in my learning.*

Part five deals with two main themes: 1.) preferred learning styles (reflecting learner empowerment as in statements 1 to 18 which leads to) 2.) learners' confidence in self-directed learning (as in statements 19 and 20).

- 1) *I like to have freedom in choosing what to learn and how to learn.*
- 2) *I want to have more opportunities to learn by exchanging opinion and information with the teacher and other learners.*
- 3) *I think it is useful if learners take turn correcting each other mistakes.*
- 4) *I think it is motivating to have learners assess each other's work in their own groups sometimes.*
- 5) *I have never had a chance to choose interesting material to read for pleasure in the English subject-course.*
- 6) *I have never had a chance to choose interesting activities in learning English.*
- 7) *I have never had a chance to choose how I should be assessed in English subject-course.*
- 8) *I have never had an opportunity to choose learning and teaching methods I would like to learn or use in the English subject- course.*
- 9) *I like a class with an expert teacher who gives exercises, tests and rules in clear orders.*
- 10) *I like a class where I am allowed to work independently, developing my own rules and consulting the teacher when necessary.*
- 11) *I like class where I interact frequently with other students, exploring possibilities and processing the language rather than learning the rules.*
- 12) *I like a class where I am allowed to sit quietly, watching and listening rather than practising and learning the rules.*
- 13) *I have never had a chance to share decision- making and negotiating with the teacher in the learning process in the English subject- course.*
- 14) *I rarely have a chance to express my opinions and real needs in learning English.*
- 15) *I always have a chance to actively participate in learning activities and the learning process in the English subject- course.*
- 16) *In the English subject-course, learners' opinions and needs are always taken into consideration to improve learning and teaching English.*
- 17) *In the English subject- course, learning and teaching methods are always adjusted to suit the learner needs.*
- 18) *Learning activities in English subjects focus on raising awareness of self- directed learning.*
- 19) *I have been trained well enough to be an independent learner in English.*
- 20) *I am ready to learn on my own now.*

Part six investigates the learners' opinions on reading and their reading practices or reading behaviours in general. These opinions and behaviours were expressed through different forms of statements and questions. Each form will be discussed respectively.

Statements one to seven are provided with choices to choose:

- 1) *Reading is the most accessible way to gain knowledge. Yes/ No*
- 2) *I love reading. Yes/ No*
- 3) *I like reading in Thai/ English / Both*
- 4) *In general, I read for study in Thai/English/Both*
 - a. *But I read Thai more than English/ I read English more than Thai/I read both in a similar amount approximately.*
- 5) *In general, I read for pleasure in Thai/English/Both*
 - a. *But I read Thai more than English/ I read English more than Thai/I read both in a similar amount approximately.*
- 6) *I like reading English in authentic texts because they represent real communication in the world. Yes/No*
- 7) *I always find time to read interesting materials for pleasure in Thai/ English/Both /Never*

8.9.1 comics												
8.9.2 websites												
8.9.3 e-mails												
8.9.4 CD-ROMs												
9.9.5 drug labels or advertisements												

Others.....

- 9) *Approximately, how long do you usually spend for reading each of these reading materials at a time?*
- 10) *When do you usually read each type of materials?*
- 11) *Where do you usually read each type of materials?*
- 12) *How do you usually get access to each type of reading materials?*

In questions thirteen and fourteen, sixteen and seventeen, the learners are asked to prioritise six given statements.

- 13) *If you feel interested in what you have read, what do you usually do?*
 - a) *take a note*
 - b) *make a photocopy*
 - c) *retell the story to others*
 - d) *discuss about it with others*
 - e) *pass a copy to others*
 - f) *buy it for yourself*
- 14) *If you have encountered any problems in reading, what do you usually do to solve your problems?*
 - a) *Ask friends for help*
 - b) *Ask a teacher for help*
 - c) *Take a note then seek for answers from reference books or Internets*
 - d) *Take a note then ask someone who knows about it*
 - e) *Give up then wait for friends or a teacher to solve the problem*
 - f) *Read until the end and try to understand it by using contextual clues or background knowledge*

Statement fifteen requires the learners to respond to three different choices.

- 15) *I think the amount of reading I have done since I have learned to read for academic purposes/pleasure/ in Thai/English/is enough/not enough/more than enough.*

Questions sixteen and seventeen also ask the learners to prioritise six given statements.

- 16) *If your answer in question fifteen is not enough, what do you think the main cause of your problem is?*
 - a) *I don't like reading.*
 - b) *I cannot afford it because some reading materials are very expensive.*
 - c) *The reading materials that I need to read are not available.*

- d) *Resources for the necessary reading materials are not accessible as service centres are not open after office hours and so on.*
- e) *I do not know reading strategies well enough to enjoy reading.*
- f) *I do not know how to manage my time well enough to have more time for reading.*

17) *If you would like to solve your problems, how are you going to deal with them?*

- a) *Adopt right attitudes towards reading*
- b) *Learn to manage time effective for reading*
- c) *Learn to acquire more reading strategies to enjoy reading more.*
- d) *Try to use various types of reading materials to motivate you read more such as websites etc.*
- e) *Practice more reading according to own ability and interest.*
- f) *Form or join a reading group of same interest.*

Appendix 8. Questionnaires for the ongoing learner-based needs analysis in the main study

I. Lesson evaluation form:

1. *What I have learnt today...*
2. *What I would like to keep or have more..*
3. *What I would like to change...*
4. *What I think is urgent to learn first next lesson...*

Teacher's comment... ..

2. Weekly journal:

1. *This week I have learnt..*
2. *The learning goal I have set this week...*
3. *The learning goal I have achieved this week.*
4. *What I plan to do next week is...*
5. *My learning progress this week is...*

Teacher's comment...

3. Monthly evaluation form:

1. *What kind of learning activities do you like most?*
2. *What reading materials do you like most between what was provided by the teacher and what you have chosen?*
3. *What have you learned so far?*
4. *What area have you improved most so far?*
5. *What do you think the teacher should do next to help you improve your learning?*
6. *What do you think you should do next to improve your own learning?*

Teacher's comment... ..

Appendix 9. Pre-set course objectives of TEP 411 236**Part A: The objectives of TEP 411 236: (From the student handbook of the faculty of Pharmaceutical Sciences 1999)**

- To enable the learners to proficiently read in English in order understand texts, academic reports, articles and medical information in their special field
- To enable the learners to practice writing academic articles and listening to keep abreast to professional advances

Part B: The modified objectives of TEP 411 236

- To enable the learners to be proficient in reading authentic English materials e.g. specialist texts, academic reports, journal articles and medical information in various forms such as drug labels and drug literatures and advertisements. This is mainly for keeping abreast of academic and professional advances.
- To enable learners to develop learners' listening and speaking skills in order to serve their communicative needs in their profession.
- To enable learners to understand the structure of academic writing through genre analysis as well as to be able to summarize it efficiently through reading and then presenting it.
- To enable learners to become more competent readers as well as more independent learners through the development of their self-directed learning.

Appendix 10. Evaluation form for group presentation at the end of the course

Topic Group No..... Name.....

5 = very good, 4 = good, 3 = satisfactory, 2= fairly satisfactory, 1 = not satisfactory

Specific areas to be evaluated	Is the content clearly presented?	Is the presentation interesting?	Does the group show analytical and critical thinking?	Could the group conclude main ideas well?	Does the group show good preparation?	Does the group show good cooperation?	Does the class cooperate well with the group?
Text							
Questions							
Vocabulary & collocation							
Cores sentences							
Summary & comments							

